

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA
Norfolk Division

BASF PLANT SCIENCE, LP,
Plaintiff,
v.
COMMONWEALTH SCIENTIFIC AND
INDUSTRIAL RESEARCH
ORGANISATION,
Defendant.

CIVIL ACTION NO.
2:17cv503

COMMONWEALTH SCIENTIFIC AND
INDUSTRIAL RESEARCH
ORGANISATION, GRAINS RESEARCH
AND DEVELOPMENT CORP., AND
NUSEED PTY LTD.

14 Plaintiff-Counterclaimants,

15 v.

16 BASF PLANT SCIENCE, LP, and
CARGILL, INC.,

Defendants=Counterdefendants.

TRANSCRIPT OF PROCEEDINGS
(Jury Trial - Day 1)

Norfolk, Virginia

October 16, 2019

BEFORE: THE HONORABLE HENRY COKE MORGAN, JR.
United States District Judge

1 APPEARANCES:

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1 APPEARANCES: (Continued)

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3 By: Alexander Owczarczak
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Counsel for Nuseed Pty Ltd

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1	I N D E X	
2	NUSEED'S	
3	<u>WITNESSES</u>	<u>PAGE</u>
4	BRENT ZACHARIAS Direct Examination By Mr. Menchel	122
5		
6		
7	E X H I B I T S	
8	JOINT	
9	<u>NO.</u>	<u>PAGE</u>
10	35	172
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		

1 (The proceedings commenced at 10:21 a.m.)

2 THE CLERK: Civil Action No. 2:17cv503, BASF Plant
3 Science, LP, BASF Plant Science GmbH, and Cargill, Inc. v.
4 Commonwealth Scientific and Industrial Research Organisation,
5 Grains Research and Development Corporation, and Nuseed
6 Party, LTD.

For BASF and Cargill, Mr. Connally, Mr. Davis, are you ready to proceed?

9 MR. DAVIS: Yes, ma'am, we are.

10 THE CLERK: For the defendant, Mr. Zaheer?

11 MR. ZAHEER: Good morning, Your Honor. Yes, we're
12 ready.

13 THE COURT: All right, counsel. We had a jury
14 brought in for a drug murder case this morning, so our jury
15 got delayed a little bit, but I think they're ready now.

16 There are just a couple of things I wanted to go
17 over with you -- or maybe more than a couple.

18 The covenant not to sue has been tendered. Has that
19 been incorporated into the stipulation?

20 MR. ZAHEER: It has not, Your Honor. You mean into
21 the pretrial order?

THE COURT: Well, the Court's reviewed the covenant not to sue, and the Court finds that it's in the form directed by the Court. So the covenant not to sue has been tendered. I don't know what the formality is of accepting

1 it, but the consideration for it is that, in return for the
2 covenant not to sue, those patents have been removed from the
3 case, and it will require advance permission from the Court
4 before there's any mention of those patents.

5 MR. ZAHEER: Understood, Your Honor.

6 MR. CONNALLY: Yes, Your Honor. Tom Connally.

7 We understand your ruling. We had raised two issues
8 with it, and if you are making a ruling on that, I don't want
9 to belabor it. The two issues were the covenant that had the
10 language that we accepted and that you said was good, was
11 made only on behalf of CSIRO, not on behalf of the other two
12 counterclaimants, and it was -- and it didn't cover the '723
13 patent, which was one of the A1 patents. We had asked that
14 it cover all the A1 patents.

15 THE COURT: Why was that not in there? I thought
16 that was --

17 MR. ZAHEER: Your Honor, the '723 patent is not one
18 of what they've been calling the A1 patents. It's not a
19 patent for which they brought the litigation initially.

20 THE COURT: Well, we'll take that up, but it
21 definitely should -- Nuseed and the other company should be
22 parties to that --

23 MR. ZAHEER: And we're happy to make that revision.

24 THE COURT: -- and I'll consider that they are. But
25 I would like the patent amended to include in the named

1 parties and signatories.

2 MR. ZAHEER: We will do that.

3 THE COURT: I thought that was in there, but I must
4 have been looking at something wrong. Okay.

5 The brief in support of Dr. Murphy is not acceptable
6 to the Court as an excuse for his not answering the question,
7 so Dr. Murphy should be available when the jury is released
8 today for the Court to examine in camera.

9 MR. CONNALLY: Understood, Your Honor.

10 THE COURT: The non-published article issue will not
11 be mentioned in opening statements, and the issue about the
12 e-mails is something that we could take up at the end of one
13 of the days; maybe not today, because we'll have to take up
14 Dr. Murphy.

15 MR. CONNALLY: Your Honor, by "the e-mails" are you
16 referring to the lab notebooks or the --

17 THE COURT: I'm talking about the claim that the
18 patents were not published in some learned treatise.

19 MR. CONNALLY: Understood, Your Honor. And if I
20 could ask one clarifying thing there, it was not my intention
21 to refer to that in this opening. Once we revisit the issue,
22 I might like to request leave in the second opening. I just
23 want to make sure that you're not ruling on the second
24 opening right now.

25 THE COURT: No, and I'm not ruling on the CSIRO

1 e-mails.

2 MR. CONNALLY: Thank you, Your Honor.

3 THE COURT: Claim 18 versus claim 13, there's no
4 need to talk about that in the opening statement here. It
5 appears to the Court that the estoppel would probably apply,
6 so the burden is going to be on the proponent to persuade the
7 Court otherwise.

8 It's up to counsel whether they want to bring on
9 evidence of ownership in this opening statement or another
10 one -- actually, that might fit better in the second one --
11 but it may be mentioned.

12 MR. ZAHEER: Understood, Your Honor.

13 THE COURT: There was some talk about the Patent
14 Office being overworked and incompetent.

15 MR. CONNALLY: Not from us, Your Honor.

16 MR. ZAHEER: If they're not going to raise it, then
17 I think it's moot.

18 THE COURT: All right. The limine objections to the
19 testimony of any of the other experts other than Dr. Murphy,
20 who we'll deal with at the close of business today, should be
21 taken up at the close of business the day prior to when it's
22 anticipated that any other experts will be testifying.

23 The first opening statement, I've extended to 30
24 minutes per side. That means all the companies on this side
25 get 30 minutes and all the companies on this side get 30

1 minutes. It's up to you as to how you want to split up the
2 time. The second phase is 40 minutes, and the third phase is
3 15.

4 I expected it may be necessary to submit special
5 interrogatories to the jury, so counsel should -- the last
6 time I looked, we didn't have any proposed special
7 interrogatories, so if either side desires those -- I don't
8 know. When do you want to submit those?

9 MR. CONNALLY: Your Honor -- Tom Connally, Your
10 Honor.

11 I think we'll need to have a little bit more feel
12 about what is going to remain in the case before we -- we can
13 spend a lot of time fighting over interrogatories on issues
14 that may go away, so I would think that would be an issue
15 maybe we take up around the time of the second opening.

16 THE COURT: Well, I thought it was premature to do
17 it now. The question is when would be an appropriate time to
18 do it, because I don't like to take the jury's time on
19 interrogatories and instructions. I try to do those after we
20 adjourn in the evening so that we don't keep the jury sitting
21 here while we're fighting over them.

22 MR. CONNALLY: Of course, Your Honor.

23 THE COURT: So I want them sometime in advance, but
24 I'm not -- I agree with you it would be premature to do it
25 now, but keep that in mind so we can have them ready for

1 review.

2 MR. ZAHEER: So we would suggest that, given the
3 timing and Your Honor's concerns, perhaps Tuesday would be a
4 good time to submit to the Court the proposed special
5 interrogatories.

6 THE COURT: I don't know where we'll be Tuesday.
7 See, I don't think the infringement case should take that
8 long, in view of the stipulation.

9 Now, it's my usual practice to read the stipulation
10 to the jury. And I think we talked about this before. I
11 think the stipulation is too lengthy and detailed to just
12 read it to the jury, and I think the best way to handle that
13 is to simply make the stipulations exhibits.

14 MR. ZAHEER: So, Your Honor, we would agree with
15 that with respect to the larger set of stipulations and the
16 pretrial order; however, there is one stipulation with
17 respect to the question of infringement that is much shorter,
18 and I think that if you cut out the "whereas" part, it's a
19 fairly compact stipulation.

20 THE COURT: I don't know. I think even that one is
21 too detailed to just read it to the jury. I think counsel
22 raised a good point, and that is I understand now why they
23 didn't want to stipulate and use the word "infringement."
24 That makes sense, so I'm inclined to think that ought to be
25 an exhibit as well.

1 It's not, obviously, anywhere near as long, but it
2 is sort of detailed, and it deals with eight different
3 patents. I think it would be better if that was made an
4 exhibit, as well.

5 MR. ZAHEER: Understood.

6 MR. CONNALLY: That would be our preference, Your
7 Honor.

8 THE COURT: Is there anything else that counsel
9 would like to bring to the Court's attention before we bring
10 in the jury?

11 MR. ZAHEER: Yes, Your Honor, one issue related to
12 openings. We can take it up now, or we can take it up before
13 openings.

14 THE COURT: Well, it better be a quick one.

15 MR. ZAHEER: Sure. So one of the issues that came
16 up in the meet-and-confer over openings is it become apparent
17 that counsel for BASF and/or Cargill expected to raise prior
18 art that had not been selected by them on their list of 14
19 that they're limited to, including prior art related to their
20 own patents. We've moved in limine to exclude that, and Your
21 Honor seemed inclined to agree that if they're going to
22 mention prior art, then it better be one of the 14 that they
23 chose for the case.

24 MR. CONNALLY: Your Honor, I will use the word
25 "prior art." I can assure you I am not making reference to

1 any specific prior art reference in my opening.

2 MR. ZAHEER: So, I mean, that's the -- I think
3 that's the problem; is if they're just going to talk about
4 the fact that, hey, we've got a bunch of patents in this
5 area, that is exactly the prohibition on going over prior art
6 that Your Honor has imposed in this case. And, in fact,
7 we're prohibited from saying that, you know, we have X number
8 of patents.

9 THE COURT: Why don't you go get the jury while
10 we're talking about this?

11 MR. ZAHEER: So that's the problem that we have. If
12 they mention patents generally, and their own patents on the
13 same technology, then that creates an even worse cloud of
14 there being a bunch of prior art out there that their expert
15 hasn't opined on and --

16 THE COURT: I don't know how to deal with that. I
17 mean, the prior art is really not an issue in the first phase
18 of the case.

19 MR. CONNALLY: Your Honor, I am going to make
20 reference to the fact that we have patents in this area. I'm
21 not going to refer to those as prior art, but it certainly is
22 relevant that we do science in this area and that we have our
23 own patents and omega-3 technology. That's basically the
24 extent of the reference in opening.

25 MR. ZAHEER: We would submit that it's not relevant,

1 and, in fact, it crosses the line to -- suggesting that
2 there's prior art, it's even worst than listing it out.

3 THE COURT: The fact that you have other patents in
4 the area would not be relevant unless they've been cited as
5 prior art, so I don't see any reason to mention it.

6 Mentioning prior art -- what difference does it make that you
7 have patents in the area? How is that relevant?

8 MR. CONNALLY: Your Honor, I think it's relevant to
9 who -- there's a dispute about who invented this particular
10 invention first, and there's a dispute -- our position is we
11 came up with it; that we were the first one to develop this
12 technology, and they learned how to do it from us.

13 THE COURT: Why didn't you cite that as prior art,
14 if that's what you're relying on, your own prior art?

15 MR. CONNALLY: Your Honor --

16 THE COURT: We're not going to deal with that right
17 now, because there's no reason to mention prior art in this
18 statement, is there? What's the point? That's the next
19 phase.

20 MR. CONNALLY: Your Honor, it was just in the nature
21 of general background; that we -- we're not arguing that --

22 THE COURT: Well, if you want to, you can state that
23 you think that there is --

24 MR. CONNALLY: All I want to say is we have patents
25 in this area. I mention it in one of my slides.

1 THE COURT: Well, I don't know why that's relevant.
2 You have to persuade me why it's relevant first.

3 MR. CONNALLY: Okay. Is it all right -- they struck
4 our -- we had a dispute over our slides, and they make an
5 objection regarding -- so we had a dispute about our slides,
6 and I had a bar on one of my slides that said BASF patents
7 mean omega-3, and they were content with us taking out the
8 reference to omega-3. It just says "BASF patents." Is
9 that -- I want to make sure that that slide and my timeline
10 remains unobjectionable, which it was last night.

11 MR. ZAHEER: And, again, we would object to it to
12 the extent that there's a characterization. It's still
13 irrelevant that they have patents, because -- the only reason
14 they're introducing that, as counsel just mentioned -- the
15 only reason to do that is to suggest that they invented it
16 first, but that they invented it first is exactly a prior art
17 invalidity argument that they're not allowed to make.

18 THE COURT: Well, right.

19 MR. CONNALLY: Your Honor, both sides are going to
20 be contending that they're innovators here, and, in
21 particular, that they -- they learned how to make omega-3
22 from canola from us, and the fact that -- both sides are
23 going to be contending that they're innovators, and for us
24 to -- we're not going to refer to specific patents --

25 THE COURT: All right. I'm not going to try to deal

1 with that.

2 You can just mention in opening statement in this
3 phase, if you want to, the fact that there was other work
4 done in this area. We believe that there was prior art --
5 prior work done in this area before they obtained their
6 patent, which is referred to as prior art.

7 That's it. No more than that. And we can save this
8 fight for another day, because it's not really going to come
9 up to any degree in this phase of the case, I don't believe.

10 MR. CONNALLY: All right, Your Honor. Thank you.

11 THE COURT: If it does, we can deal with it at that
12 time, but that's it.

13 MR. ZAHEER: And, apologies, Your Honor. Just one
14 more short issue related to the bifurcation.

15 We would submit that the jury shouldn't be told, you
16 know, if you decide in favor of this side, then you get to go
17 home early. That's our only request. We would submit that
18 the bifurcation either not be discussed or if you discuss it,
19 that it be discussed without regard to what the impact of
20 their first decision would be.

21 THE COURT: I'm not going to deal with that. I'm
22 going to discuss with the jury the phases of the trial.
23 That's it. And if the trial ends early because of some
24 ruling of the Court, so be it.

25 MR. ZAHEER: Understood. Thank you.

1 (The venire entered the courtroom.)

2 THE CLERK: Civil Action No. 2:17cv503, BASF Plant
3 Science LP, BASF Plant Science GmbH, and Cargill, Inc. v.
4 Commonwealth Scientific and Industrial Research Organisation,
5 Grains Research and Development Corporation, and Nuseed PTY,
6 LTD.

7 Counsel for BASF and Cargill, are you ready to
8 proceed?

9 MR. DAVIS: We are.

10 MR. CONNALLY: We are, Your Honor.

11 THE CLERK: Counsel for CSIRO, GRDC, and Nuseed, are
12 you ready to proceed?

13 MR. ZAHEER: We are, Your Honor. Thank you.

14 THE COURT: All right. Good morning, ladies and
15 gentlemen. My name is Henry Morgan, and I'm the judge who
16 will be presiding over the case that will begin today.

17 The first thing we're going to do is read the roll
18 of jurors. I'm going to ask each of you, when your name is
19 called, to please stand and remain standing until the next
20 name is called. The reason I say that is because the
21 attorneys want to put the face with the name, and so please
22 remain standing so they can identify who you are. But as
23 soon as the next name is called, that person will be
24 standing, and you may sit down at that point.

25 If you would please call the roll of the jury.

1 THE CLERK: Yes, sir.
2 Jerome Keith Battle, Jr.
3 PROSPECTIVE JUROR: Here.
4 THE CLERK: Ouida Branham Baum.
5 PROSPECTIVE JUROR: Here.
6 THE CLERK: Steveance Lashawn Boyser.
7 PROSPECTIVE JUROR: Here. Just Steve.
8 THE CLERK: Just Steve.
9 Sara Perugini Chiaverotti.
10 PROSPECTIVE JUROR: Here.
11 THE CLERK: Grace Cintron-Matias.
12 PROSPECTIVE JUROR: Yes, here.
13 THE CLERK: David Joseph Conlogue.
14 PROSPECTIVE JUROR: Here.
15 THE COURT: Tanya Geenen Coston.
16 PROSPECTIVE JUROR: Here.
17 THE CLERK: Lori Devon Curry.
18 PROSPECTIVE JUROR: Here.
19 THE CLERK: Sandra Lyn Daisey.
20 PROSPECTIVE JUROR: Here.
21 THE CLERK: Audra Michelle Davis.
22 PROSPECTIVE JUROR: Here.
23 THE CLERK: James Richard Doty, Jr.
24 PROSPECTIVE JUROR: Here.
25 THE CLERK: Timothy Devon Durall.

1 PROSPECTIVE JUROR: Here.
2 THE CLERK: Diana Marie Durrance.
3 PROSPECTIVE JUROR: Here.
4 THE CLERK: Lucien John Frelin.
5 PROSPECTIVE JUROR: Here.
6 THE CLERK: Pamela Joyce Glenn.
7 PROSPECTIVE JUROR: Here.
8 THE CLERK: Sherry Lee Kelly.
9 PROSPECTIVE JUROR: Here.
10 THE CLERK: Thadeus James Klak.
11 PROSPECTIVE JUROR: Here.
12 THE CLERK: Pamella Green Lee.
13 PROSPECTIVE JUROR: Here.
14 THE CLERK: Maria D. C. Reapor Limson.
15 PROSPECTIVE JUROR: Here.
16 THE CLERK: Madelyn Bortugno Maggard.
17 PROSPECTIVE JUROR: Here.
18 THE CLERK: Patrick Shand McGowan.
19 PROSPECTIVE JUROR: Here.
20 THE CLERK: Shelly Winifred Mitchell-Jones.
21 PROSPECTIVE JUROR: Here.
22 THE CLERK: Ethel Maureene Morton.
23 PROSPECTIVE JUROR: Here.
24 THE CLERK: Kevin Lee Mugglin.
25 PROSPECTIVE JUROR: Here.

1 THE CLERK: Brian Thomas O'Donnell.
2 PROSPECTIVE JUROR: Here.
3 THE CLERK: Sasha Tyler Oppleman.
4 PROSPECTIVE JUROR: Here.
5 THE CLERK: Jane Ellen Reynolds.
6 PROSPECTIVE JUROR: Here.
7 THE CLERK: Clay Spencer Rice.
8 PROSPECTIVE JUROR: Here.
9 THE CLERK: Anna Marie Roberts.
10 PROSPECTIVE JUROR: Here.
11 THE CLERK: Joshua Edward Thompson.
12 PROSPECTIVE JUROR: Here.
13 THE CLERK: Ashley Elizabeth Waldin.
14 PROSPECTIVE JUROR: Here.
15 THE CLERK: Dawn Ann Smith Wright-Jump.
16 PROSPECTIVE JUROR: Here.
17 THE CLERK: Barry Lamont Young.
18 PROSPECTIVE JUROR: Here.
19 THE CLERK: Your Honor, there are 33 jurors present.
20 Members of the jury, will you please stand and raise
21 your right hand.
22 (The venire was duly sworn.)
23 THE COURT: All right. Ladies and gentlemen, the
24 first order of business today is the voir dire examination of
25 the jury, which will be conducted by the Court.

1 The purpose of the voir dire examination is to
2 select a jury which can fairly and accurately decide the
3 issues which come before this Court. Beginning right now,
4 it's up to you and I to work together to accomplish that
5 task. I can't accomplish that task without your help, and
6 you are not going to be able to do it without my help. So
7 we've got to work together to do it, and we're going to start
8 with the voir dire examination.

9 I'm going to ask you general questions. We haven't
10 conducted a background investigation of you as jurors. You
11 are randomly selected from the community to come here and
12 perform this civic service, so the only thing we know about
13 you is what you put on your jury information card, which, as
14 you will recall, is quite limited. So I'm going to ask you
15 some questions which are designed to find out, as best we
16 can, whether you would be fair jurors to try the issues
17 presented in this case.

18 I'm not trying to determine if you're fair and
19 honest people, because that's beyond my or anyone else's
20 capability; I assume that all of you are. But you may have
21 some relationship with the parties to the case or the subject
22 matter of the case or the attorneys involved in the case or
23 something that I can't foresee that might affect your ability
24 to be fair and impartial jurors in this case, and that's what
25 my questions will be designed to find out. But unless you

1 speak up, we won't be able to make that determination. If
2 you're not sure whether or not one of my questions would
3 apply to you, always err in the issue of bringing it up, not
4 in suppressing it. I know it's not comfortable sometimes to
5 stand up and separate yourself from the crowd, but that's
6 what you have to do in this situation in order for us to
7 accomplish our purpose.

8 Now, I'm going to tell you a little bit about the
9 case before we begin the questions, because it may have some
10 effect on the answers to my questions. Now, this is a case
11 which was brought by two corporations headquartered in the
12 United States against corporations which are not
13 headquartered in the United States.

14 I think they're all headquartered in Australia, are
15 they not?

16 MR. ZAHEER: That's correct, Your Honor.

17 THE COURT: All right. In fact, I think they're
18 associated with the Australian government.

19 Now, when we come in here, we don't pay any
20 attention to whether somebody is a person or a corporation or
21 a partnership. We don't care about whether they're
22 headquartered in the United States or Australia or any other
23 company on the face of the earth.

24 It's our job to give everybody a fair and impartial
25 trial, and just as we would not hold it for or against

1 anybody because of their race, religion, gender, or national
2 origin, we're not going to hold it for or against anybody
3 because they're a corporation as opposed to an individual
4 person or as opposed to a partnership, or whether they're
5 headquartered in this country or any other country. That's
6 not an issue in the case. Everybody who comes into this
7 court is entitled to a fair and impartial trial by the judge
8 and the jury, so that's our starting point.

9 Now, this is a case involving disputed patents.
10 There's going to be a lot of scientific testimony in the
11 case, and you'll be tempted to look up words on your iPhone
12 or your computer; that is, you would be so tempted if you're
13 more adept at it than I am. I don't know how to do it, but
14 I'm sure some of you do.

15 You must decide the case on the evidence that is
16 presented here in the court and the law as the Court gives it
17 to you. You should not look outside of the evidence for the
18 answer to any issue that comes before you. It would be a
19 violation of your oath as jurors to do that. So forget the
20 fact that there may be a term -- or I shouldn't say forget
21 it, but if there's a term or a series of terms that come up
22 and you don't know how to define them, you won't be alone,
23 because I'm not a chemist, either.

24 So I'll be asking questions throughout the trial if
25 some technical term comes up, because, like most of you, I

1 assume, I'm not a chemist or a scientist, so if some complex
2 series of terms comes up, I'm going to ask a question about
3 it. Maybe the question I ask won't answer your question. If
4 there's some term that you're confused about, you can give
5 that term -- well, where is the...

6 Now, I want to introduce all of the Court officials
7 who will be participating in the trial, because if you need
8 to communicate with the Judge and you can't do so directly,
9 you can do so through various court officials.

10 Now seated directly in front of me is Lori Baxter,
11 who is the courtroom deputy clerk. It's her job to
12 administer the oath to all of the witnesses and to the jurors
13 and to keep the records that are presented here in court.
14 She also has other duties, and she'll be seated here
15 throughout the trial.

16 Seated to my front and right is Carol Naughton, who
17 is the court reporter. She will be transcribing all of the
18 proceedings which take place in open court, but I want you to
19 understand that the fact that she is here taking a record of
20 it doesn't mean that you'll have a typed record of all of the
21 testimony or all the proceedings here in court. That record
22 is usually prepared at the end of the trial, not during the
23 trial.

24 So we rely upon 12 of you who will be selected as
25 jurors to confer with one another and be willing to discuss

1 the evidence. Historically, 12 people have been able to do
2 that, as long as you're willing to listen to other people's
3 views and seek the truth from the evidence that is presented
4 here in court. So don't think that you'll be able to rely on
5 written records of the testimony. You will be able to take
6 notes throughout the trial.

7 The law clerk who is assisting the Court is Josh
8 Lang, who is seated to my right. He helps the Court with
9 researching legal issues as they come up.

10 Also seated here in court -- and he will take turns
11 being here and doing other work -- is another law clerk, and
12 his name is Brandon Goodwin, and he will also be helping the
13 Court out with issues that arise during the course of the
14 trial.

15 I will have all counsel introduced to you as we
16 progress, but I particularly want you to understand that Dale
17 Spatz, who is the court security officer, who is standing in
18 the rear of the courtroom, will be your primary liaison with
19 the Court. If you need to communicate with me -- if, for
20 example, some scientific term has not been properly
21 explained -- you let Mr. Spatz know that, and we will do our
22 best to see that we accomplish that purpose.

23 And it's best if you bring that to his attention at
24 your first opportunity. Because perhaps the best person to
25 answer the question would be a witness who has just finished

1 testifying, and so if when you adjourn to the jury room, you
2 have a question about what a witness has just said, that
3 would be the time to tell Mr. Spatz about it, and that would
4 give us the best opportunity to deal with any question you
5 have.

6 Now, we expect the trial to last about 10, what we
7 call, trial days. The Court will be in session for three
8 days this week and four days next week. We'll take Friday
9 off, because I know that you have other duties, and many of
10 you are employed, and it will be an interruption to your
11 employment.

12 Let me say one thing to you. Don't worry about your
13 boss. The law prohibits any employer from taking any adverse
14 employment action against an employee because of jury
15 service. And this case is going to take longer than most
16 cases because it involves several patents and the
17 complications that go along with patents, which are
18 themselves complicated.

19 So we expect we'll be in session three days this
20 week, four days next week, and then the week after that, I
21 can't tell you. Now, the fact that this will interrupt your
22 employment -- maybe you work on commission. Maybe you're an
23 hourly employee. Maybe you get paid for being here. Maybe
24 you don't. I cannot control that. The only thing I can
25 control is the fact that your employer cannot take any

1 adverse action against you because of the time you spend
2 serving on a jury, so that's one thing you don't have to
3 worry about.

4 I recognize that everybody is inconvenienced by
5 serving on a jury that is going to take this long, but that's
6 true of everybody. So the fact that you're inconvenienced
7 doesn't make you any different than anybody else. Anybody we
8 call in here today is going to be inconvenienced. So the
9 fact that you're inconvenienced is not a reason for you to be
10 excused as a juror.

11 Now, there are going to be three phases of this
12 case. Most cases have two phases. If it's a criminal case,
13 you hear from the prosecution, then you hear from the
14 defendant. If it's a case, a normal case over, let's say, an
15 automobile accident, then you hear first from the plaintiff
16 and then from the defendant. There may be rebuttal evidence.
17 But patent cases are a little different because of the nature
18 of the case.

19 The first part of the case, the company called
20 CSIRO -- that's the abbreviation for their lengthy name --
21 will be presenting evidence in support of their claim that
22 the American companies, which are BASF and the company which
23 sells the seeds --

24 MR. CONNALLY: Cargill, Your Honor.

25 THE COURT: -- Cargill, they are the two entities

1 which CSIRO is claiming infringe on their patent. Then, when
2 they finish the case, then we'll go to the second part of the
3 case.

4 And the defendants claim they don't infringe the
5 patents because, number one, they claim that the patents are
6 invalid and unenforceable. They also claim that they own a
7 share of the patents, and a patent can't be infringed if it's
8 invalid or unenforceable, or it can't be enforced against its
9 part-owner.

10 CSIRO will then come back for a third part of the
11 case where they will respond to the evidence presented by
12 Cargill and BASF in which they will attempt to show you that
13 the patents are valid and enforceable and that they own them.

14 The third part of the case will have to do with
15 remedies. We don't know what remedies will be available to
16 the parties until we get to the third part of the case, so
17 I'm not going to go into that at this point. I will tell you
18 that when a patent is granted by the United States Patent
19 Office, it is presumed to be valid, but that presumption is
20 not absolute.

21 The defendants -- I should say it gets confusing as
22 to who is the plaintiff and the defendant in this case. I
23 think it's better to think of them as the proponents of the
24 patents, who is CSIRO. They claim the patents are valid and
25 enforceable and infringed. The opponents of the patent say

1 they're not infringed, they're not valid, and that they own
2 part of them. They're the opponents of the patents. I think
3 if you think of them in those terms it will be easier for you
4 to analyze the evidence when it's presented. The evidence
5 will be first presented by the proponents, BASF, and then the
6 second phase of the case, the opponents of the patents will
7 present their theory of the case.

8 Now, all of the witnesses who testify for the
9 proponents will challenge their testimony. In other words,
10 if a witness comes up and testifies in behalf of the
11 proponents of the patent, that the patent is infringed, then
12 that witness will be challenged by the other side, as is the
13 case in most civil cases.

14 But just think of pro and con, as far as the patents
15 are concerned. This is the pro side; this is the con side.
16 Now, the pro side has to prove their case by what we call the
17 preponderance of the evidence, which means the greater weight
18 of the evidence. So their evidence that the patents are
19 valid and enforceable has to be established by a
20 preponderance of the evidence. However, they don't have to
21 prove that the patent is valid; the other side has to prove
22 that it's invalid. And they must prove that it's invalid by
23 clear and convincing evidence, which is a higher standard
24 than a preponderance of the evidence.

25 So when you hear from the pro side, they will have

1 to prove infringement by a preponderance of the evidence.
2 When you hear from the con side, they'll have to prove that
3 the patent was invalid by clear and convincing evidence,
4 which is a higher standard. That's because the patents have
5 been issued by the United States Patent Office, and because
6 they have, they're presumed to be valid. But, as I say, that
7 presumption is not absolute. If the con side proves to you
8 that the patent shouldn't have been issued for one of the
9 reasons that they assert, then you may find that the patent
10 is not valid. Or you may find that the con side has proven
11 to you that they -- and they don't have to prove it by clear
12 and convincing evidence; when you get to the standard of
13 proof there, it's a bit different -- or they can prove to you
14 that they have an ownership interest in the patent.

15 Now, I will give you more specific instructions when
16 we get to a later point in the case, but I want you to
17 understand what the case is about and who the parties are,
18 because it may impact your answers to the questions which I'm
19 going to ask you on voir dire.

20 Now, both parties have the right to have the facts
21 in this case decided by a fair and impartial jury; that is,
22 you should not base your decision on any bias you have for or
23 against either party. As I said at the beginning, the most
24 important thing is that you and I work together to see that
25 both parties get a fair and impartial verdict.

1 Now, you are the judges of the facts of the case; I
2 am the judge of the law of the case. You must follow the law
3 as I give it to you whether you agree with it or not. You're
4 not entitled to substitute your belief as to what the law is
5 or ought to be for my instructions to you. You must follow
6 the law as the Court states it to you and apply the facts as
7 you find them to the law in order to reach a fair and
8 impartial verdict.

9 The purpose of the voir dire examination is to
10 select a fair and impartial jury. We're going to select 12
11 jurors. 12 is the magic number. Throughout history, many
12 issues have been submitted to 12 people. The reason for that
13 is because if you get a cross-section of 12 people, you get a
14 diverse number of people, diverse number of gender, race,
15 religion, occupations, knowledge, and we want to see this
16 case decided by a jury who is representative of this
17 community.

18 If you happen to be a chemist or a scientist, that's
19 fine; it may help you understand the evidence better. But
20 you are bound by the evidence. You can't substitute your
21 opinion as to what the evidence proves for the opinion of any
22 other juror just because you have special training or
23 abilities in that area. If you do have such special training
24 or abilities, that should be helpful to your fellow jurors,
25 because perhaps you could explain the meaning of various

1 terms to them, if you are able to do so based on your
2 knowledge. You can't do so based on something you look up on
3 the computer, because you can't do that. So the fact that
4 you have knowledge would not automatically qualify you, but
5 if you do have special knowledge of chemistry or science that
6 may affect a patent, then you should let the Court and the
7 attorneys know that.

8 Now, the first thing I want to do is tell you a
9 little bit about the patent, which is that what the parties
10 have attempted to do here is develop a seed which encompasses
11 enzymes from fish to combine with enzymes -- I'm not sure if
12 "enzymes" is the right word -- to combine with a plant to
13 produce a plant which will replicate what salmon consume in
14 the wild. I'm talking about salmon as in what you have for
15 dinner. Now some salmon grow in the wild, some salmon are
16 grown on salmon farms, and the idea is if you can feed salmon
17 in farms what they would consume in the wild, that might
18 improve them, make them a better product, from various points
19 of view, which you will hear explained to you in the course
20 of the evidence.

21 And we're talking about developing something called
22 omega fatty acid. The attorneys can explain to you what that
23 means better than I can, so I'm going to leave that to them,
24 but, hopefully, their explanation will enable you to
25 understand it.

1 Now, you've heard the names of the parties in the
2 case. I'm going to ask counsel, first for the plaintiff, who
3 is on my left -- they're the plaintiff, but they're the
4 people we refer to as cons. We don't mean that as in people
5 who have been to the penitentiary, we just mean that they're
6 opposing the patent.

7 All right. If you would introduce counsel and tell
8 them where you're from so that they will have some idea
9 whether they know you or know anything about you.

10 MR. CONNALLY: Sure. Ladies and gentlemen, I'm Tom
11 Connally. I'm a lawyer representing BASF. I'm with the law
12 firm of Hogan Lovells. With me are my partners, Arlene Chow,
13 from our New York office -- I'm sorry. I'm in our Tyson's
14 Corner office, so in Virginia but not right in this area.
15 Ms. Chow is in our New York office. Anna Shaw is right near
16 me in our Washington, D.C. office. And we have a number of
17 other lawyers out there, as well. Since it's a big case,
18 there's a lot of people working on it; Earnest Yakob, Jared
19 Schubert, Ms. Anand, Takashi Okuda, and my colleague from
20 Virginia, Tom Hunt.

21 Those are the lawyers from BASF. We also have a
22 Dr. Carl Andre, from BASF, here with us.

23 Una. I'm sorry. Apologies, Una. That's one of our
24 colleagues from New York.

25 Thank you.

1 MR. DAVIS: Good morning again. Thank you, Your
2 Honor.

3 My name is Ahmed Davis. I'm an attorney with the
4 law firm of Fish & Richardson in Washington, D.C. I've got
5 colleagues here with me. Right here at the table is my
6 colleague Betsy Flanagan. She is in our Minneapolis office.
7 Towards the back I've got my colleague, Christopher Dillon,
8 who is in our Boston, Massachusetts office. And I also have
9 my colleague, Dan Gopenko, who is in our D.C. office. And
10 we're here on behalf of Cargill.

11 We have some Cargill representatives; Jeff Skelton,
12 Ms. Cass Dottridge, and Ms. Jennifer Fernholz.

13 THE COURT: All right.

14 MR. ZAHEER: Hello, everyone. My name is Daniel
15 Zaheer. I represent the Commonwealth Scientific and
16 Industrial Research Organisation, or CSIRO, as you may have
17 heard it called. I'm with the law firm called Kobre & Kim,
18 and with me are my colleagues, Hartley West, Michael Ng, Matt
19 Menchel, and Richard Ottlinger, from the law firm of
20 Vandeventer Black.

21 MR. OTTINGER: That's here in Norfolk.

22 MR. ZAHEER: And also my colleagues who may not be
23 in the room, Hugh Chan and Jonathan Barbee, are here.

24 And I'd also like to introduce folks from CSIRO,
25 Richard Aarons, and Ms. Kit Chow.

1 Thank you.

2 MS. JONES: Good morning. I'm Miranda Jones from
3 the law firm of Porter Hedges, and I represent Grains
4 Research and Development Corporation.

5 With me I have my colleagues, Megan Luh and Erin
6 Villasenor.

7 MR. SUNG: I'm Lawrence Sung. I'm here with the law
8 firm of Wiley Rein, and we represent Nuseed Pty Ltd, one of
9 the other proponents. With me today is Teresa Summers and
10 Alexander Owczarczak.

11 And we also have with us Bill Roberson, who is one
12 of our representatives from Nuseed.

13 THE COURT: All right, ladies and gentlemen. The
14 first question I'm going to ask you is are you fully able to
15 speak and understand the English language so that you'll be
16 able to understand the evidence as it's presented in court
17 today through documents, slides that we pull up on the
18 machine, and witness testimony? If you're able to do that,
19 please stand at this time.

20 As best I can tell, everybody is standing.

21 If you have any problem with your sight or hearing
22 that would impair you in understanding the evidence as
23 presented -- and I don't mean do you wear glasses to correct
24 your vision or hearing aids to help your hearing, because I
25 need both of them myself, but are you able to hear what's

1 said and see what's going to be presented sufficiently to be
2 a juror? If you are, please sit down.

3 All right. Now, you've heard the names of the
4 companies that are the parties to this suit. Are any of you
5 employed by any of these companies, or are any of you
6 stockholders in any of these companies? Do any of you do
7 business with any of these companies or have any relationship
8 with any of these companies that may affect your ability to
9 be a fair and impartial juror -- and this is very
10 important -- or which would affect the public's perception of
11 whether you would be a fair and impartial juror?

12 Perception is very important. You might be related
13 to one of the owners of one of these businesses, and you
14 might be a perfectly honest person who could render a fair
15 verdict, but it would create the perception that you would
16 not be a fair and impartial juror if you were a major owner
17 of one of these companies, for example. So do you have any
18 relationship with any of these companies which, if known
19 publicly, would affect the public perception of your fairness
20 and impartiality?

21 We have one. Please stand. If you would, pass the
22 microphone over to the gentleman.

23 Whenever you answer a question, please start by
24 giving your name, and then tell me what your relationship is
25 potentially to any of these litigants.

1 PROSPECTIVE JUROR: Clay Rice. I work at Perdue
2 Agribusiness, which was formally owned by Cargill, and I'm
3 also a union electrician. I've also worked at BASF plants.
4 I just don't know. I'm in the grain business, so I don't
5 know if that has anything to do with the case or not.

6 THE COURT: All right. Well, that is certainly
7 information that the Court should be aware of, but do you
8 think that would affect your ability to be a fair and
9 impartial juror?

10 PROSPECTIVE JUROR: I'm not sure. I mean, I've
11 worked there. That's all I was trying to -- I don't know if
12 that had anything to do with anything or not.

13 THE COURT: So you're unsure whether that would
14 affect your ability to be a fair and impartial juror or --

15 PROSPECTIVE JUROR: I mean, it shouldn't. I
16 wouldn't think so, but I've worked at Perdue, which was
17 formerly -- I worked there when it was owned by Cargill, as
18 an electrician, and now I'm a senior electrician for Perdue,
19 at the same facility here in Norfolk.

20 THE COURT: But it's no longer owned by Cargill?

21 PROSPECTIVE JUROR: No, but we're in the shipping
22 business, and we're one of the larger exporters of grain on
23 the East Coast.

24 THE COURT: Okay. And you formerly worked for BASF?

25 PROSPECTIVE JUROR: I've been at several plants

1 throughout the country. I couldn't tell you which plants and
2 what states they were in. It's been for the last 25 years.

3 THE COURT: Okay. Well, thank you.

4 MR. CONNALLY: Your Honor, may I ask a clarifying
5 question?

6 THE COURT: What's that?

7 MR. CONNALLY: Was he employed by BASF, or was he an
8 electrician working for someone else at jobs at BASF plants?

9 PROSPECTIVE JUROR: A contractor.

10 MR. CONNALLY: Thank you, Your Honor.

11 THE COURT: All right. Thank you.

12 Let me ask the same -- what was your juror number,
13 sir?

14 THE CLERK: 28.

15 PROSPECTIVE JUROR: 28.

16 THE COURT: I want to ask you the same question
17 about all of the people who have been identified as attorneys
18 or representatives of their various companies, the same
19 question I asked you about the corporate entities who are
20 litigants.

21 Do you have any relationship with them? Have they
22 ever represented you? Do you know any of them personally, or
23 do you have any other relationship that may affect your
24 ability to be a fair and impartial juror?

25 All right. I see one gentleman standing. Would you

1 give us your name first, sir.

2 PROSPECTIVE JUROR: Patrick McGowan.

3 THE COURT: And what number juror are you?

4 PROSPECTIVE JUROR: 21.

5 THE CLERK: 21.

6 THE COURT: Right, okay. And what information do
7 you have for us?

8 PROSPECTIVE JUROR: Vandeventer Black is active
9 with --

10 THE COURT: I'm sorry?

11 PROSPECTIVE JUROR: Vandeventer Black, one of the
12 counsel for the law firms -- I don't have any specific
13 relation with the specific representative, but that
14 particular company, several of the colleagues are active in
15 the maritime industry. I'm a maritime student at Old
16 Dominion, and we work a lot with Vandeventer Black for the
17 Norfolk Propeller Club and the Old Dominion University
18 Propeller Club. I'm not sure if that is relevant information
19 but...

20 THE COURT: All right. Do you think that connection
21 would have any affect on your ability to be a fair and
22 impartial juror?

23 PROSPECTIVE JUROR: I'm not sure.

24 THE COURT: What do you mean by saying you're not
25 sure?

1 PROSPECTIVE JUROR: I don't think it would have any
2 effect.

3 THE COURT: Okay. Thank you.

4 I've told you a little bit about the case. I always
5 ask this question; although, it seems to be doubtful anyone
6 would have an affirmative answer. But is there anybody on
7 the panel who believes that they have any prior information
8 about the case, that have ever heard of the case or heard of
9 patents of this general nature?

10 Yes, sir.

11 PROSPECTIVE JUROR: Diana Durrance, Juror 13. Just
12 so I'm clear --

13 THE COURT: 13?

14 PROSPECTIVE JUROR: Yes, 13. When I called the line
15 to find out if I had to serve as a juror Friday night --

16 THE COURT: I'm sorry, I'm having trouble
17 understanding you. I'm a little hard of hearing. Can you
18 speak a little --

19 PROSPECTIVE JUROR: Diana Durrance, Juror 13. When
20 I called the information line Friday night to find out what
21 day I had to serve as a juror, and when I found it was today,
22 I, probably against the rules, went on the court's web site
23 to see what type of case it was and got the information
24 regarding the case and went online and did some research
25 about what the case was about, and I did form an opinion as

1 to how I thought the case -- who I thought -- how I thought
2 it should go.

3 THE COURT: You say you formed an opinion?

4 PROSPECTIVE JUROR: I formed an opinion about how I
5 felt the patent was.

6 THE COURT: About what you thought the patent was?

7 PROSPECTIVE JUROR: When I went online and saw what
8 the case was, I Googled it, and there's tons of information
9 regarding these companies on the internet, and it talks about
10 the case and the validity of the patent and what they're
11 fighting about, and I just got a bunch of information that I
12 probably shouldn't have gotten. But I'm just being honest to
13 let you know that's what I did.

14 THE COURT: Well, you're doing the right thing.

15 Thank you for the information.

16 Is there anyone else?

17 Okay. Is there any member of the jury panel who is
18 a scientist or chemist by education or occupation?

19 Is there anyone who believes that because this
20 case -- other than the lady who spoke up -- because this case
21 involves a patent dispute that that would affect in any way
22 your ability to be a fair and impartial juror?

23 All right. I have quite a long list of witnesses
24 here who may be testifying in this case. I say "may be," and
25 this information has been furnished by counsel.

1 Did you combine your list of witnesses, or is the
2 list I have -- I think this is a combined list of witnesses
3 for each party. I'll ask each party to listen carefully to
4 the names as I read them and make sure I've included
5 everyone.

6 Now, these witnesses come from a pretty broad
7 geographical area, and names coming from such a wide area may
8 be similar to the name of someone you know locally, who may
9 or may not be the person who is a witness. If any of you
10 think that this may be a person that you know -- and that's
11 all I'm asking, do you know the person. If you do know them,
12 then I'll have further questions for you. If you think you
13 know them, stand up, and remain standing until I finish
14 reading the entire list.

15 Carl Andre.

16 You pronounce it Joerg Bauer?

17 Mark Christiansen.

18 Dmitry Gromov.

19 Keith Horton.

20 Willie Loh, L-o-h.

21 Denis Murphy.

22 Brian Napper.

23 Lindsay Adler.

24 Robert de Feyter, F-e-y-t-e-r.

25 Allan Green.

1 Peter Nichols.
2 James Petrie.
3 Suriner Singh.
4 Benita Boettner.
5 Malcolm Devine.
6 Jason McAllister.
7 Andrew Thomas.
8 Brent Zacharias.
9 Ron Osmond.
10 Andry Andriankaja.
11 Who can pronounce that name for me? Nobody.
12 MR. ZAHEER: It's "AN/DREE/ONK/KA/YA."
13 THE COURT: Okay.
14 Lorin Debonte.
15 Richard Fletcher.
16 Kristin Gray.
17 Red Andres Mollan.
18 Toralf Senger.
19 John Jarosz.
20 Ljerka Kunst.
21 Guanqun, also known as "Gavin," Chen.
22 David Hildebrand.
23 Susan Crennan.
24 All right. I've only got one person.
25 What name do you recognize, sir?

1 PROSPECTIVE JUROR: Lucien Frelin. You said Jason
2 McAllister. I work with a Jason McAllister. Probably not
3 the same person, but I don't know who you're talking about.

4 THE COURT: Where is Jason McAllister from?

5 MR. SUNG: Your Honor, he's from Horsham, Australia.

6 PROSPECTIVE JUROR: Probably not the same person.

7 THE COURT: Thank you, sir.

8 All right. I'll ask you another question that most
9 always get quite a few positive answers to, and that is have
10 any of you ever served on a jury before, in either a state or
11 federal court, involving either a civil or criminal case? If
12 you ever so served before, please stand at this time.

13 I'll start with the gentleman on my left. Now, what
14 I'd like you to do is first give us your name and juror
15 number, and then tell us what court it was and what kind of
16 case it was.

17 PROSPECTIVE JUROR: Josh Thompson, Juror 30. It was
18 a criminal case in Virginia Beach.

19 THE COURT: And what was the criminal charge?

20 PROSPECTIVE JUROR: Assault on an officer.

21 THE COURT: And what was the result of the jury's
22 verdict?

23 PROSPECTIVE JUROR: Hung jury.

24 THE COURT: All right. Do you think that that
25 service would have any effect on your ability to be a fair

1 and impartial juror in this case?

2 PROSPECTIVE JUROR: No.

3 THE COURT: Thank you, sir.

4 The lady in the red jacket.

5 PROSPECTIVE JUROR: Pink. Number 8, Lori Curry.

6 THE COURT: What was your number?

7 PROSPECTIVE JUROR: Number 8.

8 THE COURT: Number 8. Yes, ma'am.

9 PROSPECTIVE JUROR: It was a civil case in
10 St. Louis, Missouri, Church's Fried Chicken against somebody
11 that fell. It was about 25 years ago.

12 THE COURT: Do you think that that service would
13 have any effect on your ability to be a fair and impartial
14 juror in this case?

15 PROSPECTIVE JUROR: No, sir.

16 THE COURT: Thank you, ma'am.

17 PROSPECTIVE JUROR: Good morning. Number 5, Grace
18 Cintron-Matias. And it was five years ago here in Norfolk.
19 It was just a car accident, and it was only one day that I
20 was there participating.

21 THE COURT: Do you think it would affect your
22 ability to be a fair and impartial juror in this case?

23 PROSPECTIVE JUROR: No, sir.

24 THE COURT: All right. Yes, ma'am?

25 PROSPECTIVE JUROR: Juror Number 2, Ouida Baum.

1 About 20 years ago, it was in Virginia District Court, it was
2 a criminal case.

3 THE COURT: And do you remember what the criminal
4 charge was?

5 PROSPECTIVE JUROR: Theft, I believe.

6 THE COURT: All right. And did you find the
7 defendant guilty or not guilty?

8 PROSPECTIVE JUROR: Guilty.

9 THE COURT: All right. Do you think that service
10 would affect your being a fair and impartial juror in this
11 case?

12 PROSPECTIVE JUROR: No, it won't.

13 THE COURT: Thank you, ma'am.

14 PROSPECTIVE JUROR: Pamela Glenn, Juror Number 15.
15 About eight years ago, here in Norfolk, I served on a jury as
16 between two best friends. Basically, it was a freak
17 accident. They was working on a house, and one of the best
18 friends asked them to throw a broom upstairs, and when he
19 threw it, it went through his eye. And he sued his best
20 friend for that accident, and so we basically had to decide
21 on what he should be awarded.

22 THE COURT: Do you think that that service would
23 affect your ability to be a fair and impartial juror in this
24 case?

25 PROSPECTIVE JUROR: No.

1 THE COURT: Thank you, ma'am.

2 Has any member of the panel ever obtained or
3 participated in the obtaining of a patent?

4 Do any of you work for a company which seeks to
5 obtain patents?

6 PROSPECTIVE JUROR: Hi. Sasha Oppleman, Juror 26.
7 I work for a company that does acquire patents.

8 THE COURT: Your company what, now?

9 PROSPECTIVE JUROR: The company that I work for and
10 own, partially own, acquires patents.

11 THE COURT: Acquires patents?

12 PROSPECTIVE JUROR: Yes.

13 THE COURT: And in what field?

14 PROSPECTIVE JUROR: Software engineering.

15 THE COURT: Software for computers?

16 PROSPECTIVE JUROR: Correct.

17 THE COURT: Have you ever dealt with any patents in
18 the field of agriculture or --

19 PROSPECTIVE JUROR: I have not.

20 THE COURT: All right. Do you think that the fact
21 that you deal in patents would affect your ability to be a
22 fair and impartial juror in this case?

23 PROSPECTIVE JUROR: No.

24 THE COURT: All right. Thank you, ma'am.
25 Yes, sir.

1 PROSPECTIVE JUROR: Clay Rice, Juror 28. Perdue
2 also does patents on chickens and soybeans and corn and
3 wheat, and other things.

4 THE COURT: All right. Do you think that would
5 affect your ability to be a fair and impartial juror in this
6 case?

7 PROSPECTIVE JUROR: (Shakes head.)

8 THE COURT: Is that a "No"?

9 PROSPECTIVE JUROR: No. No, sir.

10 THE COURT: Thank you.

11 PROSPECTIVE JUROR: Michelle Audra Davis, Juror 10.
12 The company that I work for develops military uniforms, and
13 I'm not sure if they do a patent process through that or not.

14 THE COURT: All right. Do you think that would
15 affect your ability to be a fair and impartial juror in this
16 case?

17 PROSPECTIVE JUROR: No, Your Honor.

18 THE COURT: Thank you, ma'am.

19 Yes, sir.

20 PROSPECTIVE JUROR: Lucien Frelin, Juror 14. I work
21 for a company that is in information technology, and we do
22 file patents.

23 THE COURT: What kind of patents?

24 PROSPECTIVE JUROR: Information technology, so IT
25 software engineering.

1 THE COURT: Have you ever worked on patents that
2 dealt with agricultural products?

3 PROSPECTIVE JUROR: No, sir.

4 THE COURT: Do you think that your work would affect
5 your ability to be a fair and impartial juror in this case?

6 PROSPECTIVE JUROR: No.

7 THE COURT: Thank you.

8 Do any of you or any members of your immediate
9 family, have they ever worked for the Patent Office? By
10 "immediate family" I mean someone to whom you're related and
11 who lives in the same household with you. I don't mean some
12 distant cousin. But have any of you or any member of your
13 immediate family ever worked for the Patent Office?

14 All right. I'll ask counsel to approach the bench.

15 Ladies and gentlemen, during the course of the trial
16 it will be necessary for the Court to confer with counsel at
17 the bench. What that means is we'll be up here whispering,
18 and if you think we're doing that so you can't hear us, you'd
19 be exactly right; that's why we're doing it. But the reason
20 we do that is not to be impolite. I hope you don't think
21 that we're being impolite. The reason we do it this way is
22 the alternative is I'd have to ask all of you to get up and
23 vacate the courtroom while we're up here talking, and that's
24 not very efficient. So we hope it will just save time and be
25 more efficient to confer up here.

1 (The following was heard at the sidebar:)

2 THE COURT: Okay. First off, is there any questions
3 that you think I should have asked that I haven't?

4 MR. NG: We don't have anything further.

5 MR. CONNALLY: Your Honor, the people who have been
6 involved in patent ownership, whether they've been involved
7 in any patent litigation...

THE COURT: Okay, I'll ask them that.

Now, let's look at the jurors. We've got the juror
who looked up things on the internet, Number 13.

11 MR. CONNALLY: I think she's already formed an
12 opinion in the case.

13 THE COURT: I think she has, too.

14 All right. Juror 14. She owns and works with
15 patents. I don't think that disqualifies her. She works
16 with computer tech patents, but I will ask her the follow-up
17 question.

18 MR. CONNALLY: We would like you to ask her the
19 follow-up question, Your Honor.

THE COURT: All right. Jury Number 21 is a student
who is currently working --

22 MR. CONNALLY: We have no concern with his
23 relationship with the Vandeventer Black firm.

24 THE COURT: Okay. Juror 26 works with patents.
25 He's in the same category as the other one.

1 MS. FLANAGAN: Right.

2 THE COURT: And Juror Number 28, his work for the
3 company that was formerly owned by --

4 MR. ZAHEER: He was employed by the contractor.

5 THE COURT: He was a contractor for one, and another
6 one he worked for, I guess, was a subsidiary of...

7 MR. ZAHEER: Correct, Your Honor, his former
8 employer is a party. He says he doesn't have an
9 understanding, but I think he would be biased, and we would
10 move to excuse him for cause.

11 MR. CONNALLY: We have no objection to him being
12 stricken.

13 THE COURT: Okay. So then just two that we'll
14 excuse for cause.

15 MR. CONNALLY: We do have another -- two others.
16 One is for cause.

17 We do have an attorney, a lawyer, O'Donnell, Number
18 25. He is a skilled federal practice lawyer. This case is
19 complicated. Our concern is he would turn this into a bench
20 trial where you weren't presiding. He would have undue
21 influence on the jury.

22 THE COURT: I don't know anything about him.
23 Apparently he practices in federal court. I don't think that
24 you automatically disqualify somebody because of them being
25 an attorney.

1 MR. NG: We don't have any objection to that.

2 THE COURT: Objection to what?

3 MR. NG: We don't object if they're seeking to
4 remove him.

5 MR. CONNALLY: We're looking to strike him for
6 cause.

7 THE COURT: If both of you want to strike him, I'll
8 strike him.

9 MR. CONNALLY: And then the last was Juror Number 6,
10 Mr. Conlogue. He was asleep for most of your instructions.
11 He was asleep -- I was timing it out -- for at least 20
12 minutes.

13 THE COURT: Really?

14 MS. FLANAGAN: Yeah.

15 THE COURT: Well, I guess we better get rid of him,
16 shouldn't we?

17 MR. CONNALLY: That's all we have.

18 MR. NG: That's all for us.

19 THE COURT: Everybody satisfied with the jury
20 selection?

21 MR. CONNALLY: Subject to the follow-up question,
22 Your Honor.

23 THE COURT: Right. All right.

24 (The following was heard in open court:)

25 THE COURT: A follow-up question, ladies and

1 gentlemen: Two of you indicated you worked with patents.
2 The only question I have for you is have you ever been
3 involved in litigation over a patent that you work with or
4 own?

5 PROSPECTIVE JUROR: No.

6 THE COURT: Would you state your name, please.

7 PROSPECTIVE JUROR: Sasha Oppleman. No.

8 THE COURT: All right. Thank you.

9 PROSPECTIVE JUROR: No. Clay Rice.

10 THE COURT: Okay. Was there -- I guess there were
11 three.

12 MR. NG: May we approach? There was one question
13 that we jointly wanted to ask them.

14 THE CLERK: That lady there.

15 PROSPECTIVE JUROR: No. Audra Davis.

16 THE COURT: Anything further?

17 MR. NG: Your Honor, may be approach?

18 MR. CONNALLY: I'm not requesting this question, but
19 I've got no objection to it.

20 (The following was heard at the sidebar:)

21 MR. NG: Your Honor, can we poll the jury about
22 whether any of them have a felony conviction, a criminal
23 conviction? I don't believe we've asked about that.

24 THE COURT: They're not eligible to be on a jury if
25 they have a felony.

1 MR. NG: All right.

2 (The following was heard in open court:)

3 THE COURT: All right, ladies and gentlemen. That
4 completes the Court's voir dire questions for the jury.
5 We're now going into the second phase of jury selection,
6 which entitles each of the parties to exercise what we call
7 peremptory strikes. That means that they can strike any
8 juror for any reason, as long as it's not an illegal reason.
9 If it's an illegal reason, the Court will take care of it,
10 but they don't have to have a reason to exercise a peremptory
11 strike. I tried cases for many years myself and went through
12 this process, and I can tell you that it's not a scientific
13 process.

14 People have all kinds of different ideas about why
15 they would want to strike a particular juror, such as maybe
16 they like the other side. That would be a good reason to
17 strike them. I don't know how they're going to know that.
18 In any event, they have the right to make peremptory strikes.

19 A few of you -- not many -- have been excused
20 because of your answers to the Court's voir dire, but we
21 don't announce who that is. And we have to bring in many
22 more jurors than the 12 we eventually select, so it may be
23 that your name is never randomly selected.

24 The deputy clerk randomly picks names out of a box
25 and puts them in the jury board. It may be that your name is

1 never randomly picked, so the fact that you don't serve on a
2 jury does not mean, number one, that you were disqualified
3 because of any answer you gave; or, number two, that anybody
4 exercised any peremptory strike against you. You may never
5 have made it from the random selection process which goes
6 into the board.

7 But we have to bring in many more people than
8 actually end up serving -- I'm sure that's obvious to you --
9 because we never know how many people are going to be
10 disqualified because of the questions I ask, and then we also
11 have to have enough extra potential jurors to allow the
12 peremptory strikes.

13 So while the attorneys are trying to decide who they
14 want to exercise their peremptory strikes against, I'm going
15 to be going over some preliminary instructions with you.

16 Now, the attorneys are not going to be paying
17 attention to what I'm saying because, number one, they're
18 doing other things; and, number two, they've heard what I'm
19 saying probably many times before. And the reason that I'm
20 asking you questions while they're doing this is simply to
21 save time, to be more efficient.

22 Now, I should have asked you one more question, and
23 that is, is there anybody on the jury panel who has some
24 reason that they can't be a fair and impartial juror that I
25 didn't ask about?

1 Yes, ma'am.

2 PROSPECTIVE JUROR: I'm Number 18. And my name is
3 Pamella Green Lee.

4 THE COURT: I'm sorry. What number was that?

5 PROSPECTIVE JUROR: 18.

6 THE COURT: Okay.

7 PROSPECTIVE JUROR: And my name is Pamella Green
8 Lee. My daughter is getting married. My only daughter is
9 getting married in two weeks. My mind and my heart is not
10 going to be here, and I just wanted to make that known.

11 THE COURT: All right. Thank you.

12 PROSPECTIVE JUROR: Thadeus Klak, 17. I put in for
13 an excuse a few weeks ago with my itinerary for a trip that's
14 already been paid for. It's not until next week, so the
15 response I got was to make sure I mention that to you today.

16 So I would be available this week but not next week.

17 THE COURT: And you're Juror 17?

18 PROSPECTIVE JUROR: Yes, sir. Yes, Your Honor.

19 THE COURT: Well, I guess I better see counsel...

20 THE CLERK: Your Honor, more people are standing up.

21 THE COURT: All right. Well, let's not make this an
22 infection of the jury panel here. I'm not excusing somebody
23 just because it's inconvenient. There are more and more
24 people standing up. You better have a good reason.

25 PROSPECTIVE JUROR: I forgot from what the reason

1 was now. I'll think about it.

2 PROSPECTIVE JUROR: My name is Barry Young, Juror
3 33. My wife just had surgery Monday. She had a lump behind
4 her kidney.

5 THE COURT: She had what?

6 PROSPECTIVE JUROR: A lump behind her kidney, and
7 she -- basically, right now I'm the only one in my household
8 who is making the income. I have to take my wife back to the
9 doctor Monday to take it out, and she is going to be out of
10 work for a whole month, so basically everything is on me.

11 THE COURT: All right. What juror number was that?

12 THE CLERK: 33.

13 PROSPECTIVE JUROR: I'm Number 4. My name is Sara
14 Chiaverotti. My husband is a firefighter, and he works
15 24-hour shifts. Starting this Friday, I will not have child
16 care every time he's on shift. So there is no way for me to
17 get my son to school and/or home from school if I'm here and
18 he's on shift.

19 THE COURT: All right.

20 PROSPECTIVE JUROR: Juror 10. We were told to speak
21 now or forever hold our peace. So I have a vacation that's
22 paid in full on November 9th. I know the case is only 10
23 days, but I know deliberations can take a little bit longer.

24 THE COURT: I'm sorry. You've got what, now?
25 You've got a vacation -- what?

1 PROSPECTIVE JUROR: That's been paid in full and
2 it's nonrefundable.

3 THE COURT: When does it start?

4 PROSPECTIVE JUROR: November 9th, so...

5 THE COURT: November 9th.

6 PROSPECTIVE JUROR: We should have plenty of time,
7 but deliberations can take awhile. I don't know.

8 THE COURT: All right.

9 PROSPECTIVE JUROR: I'm Number 19, and I'm a
10 military wife, and my husband is currently deployed in
11 Bahrain and --

12 THE COURT: What?

13 PROSPECTIVE JUROR: My husband is currently deployed
14 in Bahrain and --

15 THE COURT: Your husband what? I can't understand
16 you.

17 PROSPECTIVE JUROR: Oh. My husband is currently
18 deployed in Bahrain, and I'm the only parent there. So and
19 I've got like two little ones to take care of. We only have
20 one income for us in the family, so I can't afford child
21 care.

22 THE COURT: All right.

23 PROSPECTIVE JUROR: I remember now.

24 THE CLERK: Your name? Your number?

25 PROSPECTIVE JUROR: Ethel Morton, Number 23. I just

1 wanted to make it clear that I really don't even really
2 understand what I'm going to be trying to decide upon. I
3 don't understand the case. I don't know whether I can be
4 fair or not, because I don't even know what it's all about,
5 really.

6 THE COURT: All right.

7 PROSPECTIVE JUROR: My name is Shelly Jones, Juror
8 Number 22. I'm concerned, because I do have an 87-year-old
9 mother at home, and I am concerned about not having access to
10 a phone to be able to take care of her, if I need to.

11 In addition, I am a social worker, and I work with
12 children that have severe social and emotional needs, and so
13 I am literally sitting here chomping at the bit, thinking
14 that I need to be with my students, with my children within
15 the school system.

16 (The following was heard at the sidebar:)

17 THE COURT: All right. What about Juror 17?

18 MR. NG: He's got vacation next week.

19 THE COURT: We have to let him go.

20 MR. CONNALLY: All right.

21 THE COURT: Juror 18.

22 MR. NG: If it's anything like my mom at my sister's
23 wedding, she has a hardship, if she is planning a wedding.

24 MR. CONNALLY: She said she would be preoccupied.

25 MR. NG: It's in two weeks.

1 THE COURT: She did say that.

2 Juror 4, is she the firefighter one?

3 MR. NG: Yes, with no child care.

4 THE COURT: I guess we have to get rid of her.

5 Juror 10...

6 MR. CONNALLY: Her vacation wasn't until the 9th of
7 November. I certainly hope we're done by then.

8 THE COURT: I can guarantee it.

9 MR. CONNALLY: I'm sure you can.

10 THE COURT: Have we talked about Juror 19?

11 MS. FLANAGAN: Not yet.

12 MR. NG: Child care issues, and her husband is
13 deployed overseas.

14 THE COURT: Okay. Let's get rid of her.

15 And the last one is 33.

16 MR. CONNALLY: With his wife having surgery, I think
17 so, Your Honor.

18 MR. NG: We agree, Your Honor.

19 THE COURT: Is that the surgery one? Okay. Let him
20 go. All right.

21 MR. CONNALLY: There were two others, Your Honor. I
22 don't know if you wanted to talk about them.

23 MS. FLANAGAN: 22.

24 MR. CONNALLY: 87-year-old mother.

25 THE COURT: I don't. I don't want to dismiss her;

1 not much older than me.

2 MR. CONNALLY: There was a woman who didn't
3 understand anything. That doesn't seem to relate to
4 hardship, Your Honor.

5 THE COURT: No. All right.

6 (The following was heard in open court:)

7 THE COURT: Ladies and gentlemen, during the course
8 of the trial the Court may make comments to counsel. They
9 may have to do with a number of issues, such as objections to
10 evidence, argument on objections, the use of abbreviations
11 for scientific terms, the use of scientific terms that I
12 don't understand. So this is the kind of case where the
13 Court may be asking a number of questions.

14 Normally, I don't do that, but in a case involving
15 scientific terms with which I'm not familiar, I'm going to be
16 asking questions, because it's important that you understand
17 it and I understand it. Both of us have to understand it in
18 order to do our jobs, so that's why I said to you earlier
19 that you're entitled to take notes, and probably the most
20 important notes would be notes about terms or a series of
21 words that you don't understand the meaning of. As I said,
22 if that happens, slip a note to our court security officer at
23 your first opportunity so that we can try to respond.

24 Don't assume that because I ask questions that I'm
25 expressing any viewpoint on the testimony of the witness that

1 I'm questioning. The fact that I ask questions doesn't mean
2 that I do believe or don't believe the witness. If it's an
3 expert witness who's giving an opinion, which we'll talk
4 about later, don't assume that I believe or disbelieve his
5 opinion or her opinion. I'm doing it probably to help
6 educate myself and perhaps you, as well, and that will come
7 up a number of times.

8 Also, objections will come up. An attorney will
9 object to a question, to a witness, or will object to some
10 exhibit that's offered in evidence. You should not hold it
11 against an attorney because he or she makes an objection.
12 That's their job. We have rules of evidence that must be
13 obeyed. Sometimes there is an honest difference of opinion
14 of whether or not that rule applies to a particular question
15 or a particular exhibit.

16 If that's the case, then I'll call counsel up here
17 and rule on it, or if the Court believes it knows the answer
18 without further argument, I may just say "overruled" or
19 "sustained." If I say "sustained," you should ignore the
20 question. You may be curious about what the answer would
21 have been to that question, and you might not like the fact
22 that I sustained the objection, but we have rules of
23 evidence.

24 It's the attorney's job to object if the evidence
25 does not fit into our rules, so you shouldn't hold it against

1 the attorney for making the objection or me for sustaining
2 it. If I overrule the objection, you shouldn't hold it
3 against the attorney who made the objection, because normally
4 such objections are made with the good-faith belief that the
5 evidence shouldn't be admitted, but I may differ in my view
6 from the attorney making the objection.

7 The fact that the attorney made an objection doesn't
8 mean he or she has done anything wrong. They're just doing
9 their job, and when I rule on it, I'm doing my job. If I
10 overrule the objection, you just pretend like the objection
11 was never made. So it's important, because in a technical
12 case like this, it's likely that there will be objections.

13 Now, let's talk about what is evidence and what
14 isn't. Well, evidence may take many forms. It may be the
15 testimony of a witness. It may be an exhibit. It may be an
16 exhibit that's shown to you on the screen. It may be a
17 lengthy document or a short document. But what evidence is
18 not is the opening statements made by counsel and the closing
19 arguments made by counsel.

20 Opening statements are a prediction by the attorneys
21 of what the evidence will be. Sometimes the evidence doesn't
22 turn out to meet their predictions, for any number of
23 reasons, many of which are perfectly genuine and reasonable.
24 So the point of it is that what the attorneys say is not
25 evidence.

1 Now, like all other things, it seems in the law if
2 an attorney asks a question and the answer is "yes" or "no,"
3 then, of course, the question is partly answered. But the
4 fact that a question is asked by an attorney does not mean
5 that the subject of that question is evidence. Now, we've
6 all watched TV shows and movies about trials, and one thing
7 that's particularly aggravating to me is when an attorney
8 asks a question and the other side says, "Objection," and the
9 attorney says, "Withdrawn," with a smirk on his or her face
10 and walks back to counsel table with their back to the judge,
11 well, that is not proper conduct. I don't expect to see that
12 in this case, and if I do, I'll take appropriate action.

13 But that's why a question is not evidence, because
14 it happens that some attorneys in some cases ask a question
15 knowing it's the wrong question. And if they do, I'll take
16 care of that, but that's why you cannot treat a question as
17 evidence until it's answered.

18 Now, there are other reasons why what attorneys say
19 is not evidence. As I say, we're talking about opening
20 statements. Opening statements are a prediction of what the
21 evidence will be, and sometimes it turns out that that's not
22 an accurate prediction. That does not mean that the attorney
23 did anything wrong. The opening statements are a very
24 important part of the case, because they will help you
25 understand what the case is about and what to expect from the

1 evidence, because you hear the evidence one witness, one
2 question at a time, just like I do.

3 The attorneys have lived with this case quite a
4 while and have spent a lot of time on it, so they know the
5 answer or they expect they know the answer before they ask a
6 question, but we don't. So it's up to them to educate us in
7 the opening statements of what to expect. It's like a map.
8 The opening statements should enable us to find the evidence,
9 what to look for. That's the purpose of it, but it's not
10 evidence. So if they say in the opening statement that the
11 light was red and there's no evidence as to what color the
12 light was, then you can't find that the light was red. The
13 fact that they said it was red in opening statements does not
14 constitute evidence. The same thing in closing arguments.
15 They're not entitled to say to you, well, the light was red
16 if they haven't produced evidence to support that.

17 Now, of course, when they make their closing
18 arguments, we call them, it's up to you to test the accuracy
19 of what they tell you the facts are in their opening
20 statement. The facts may be disputed. I suspect there are
21 almost always some facts that are disputed, and if you have
22 to choose between one witness and another, it's up to you to
23 use your experience of a lifetime to decide which witness is
24 more worthy of belief than another.

25 You may consider the appearance of the witness, the

1 witness's opportunity for knowing the truth or falsity of
2 what he or she says, whether he or she has any prejudice or
3 bias for or against either of the parties, whether his or her
4 testimony is consistent with other evidence in the case which
5 you find believable. All of these are things which you, as
6 jurors, have to rely upon your lifetime experience to decide.

7 In your dealings with other people, you have to
8 think all the time. If you're going to buy something, is
9 what the salesman telling me accurate? If you're watching
10 the news, is what the newsman is telling me true or not? If
11 you're reading the newspaper, is that true or not? You have
12 to make those decisions all the time. You have to use the
13 same skills you apply to your daily life to decide which
14 witness is telling the truth and which witness is entitled to
15 more weight and consideration than another witness.

16 When we come to expert witnesses, they have special
17 rules for them. So-called expert witnesses are entitled to
18 give you opinions. Ordinarily, witnesses cannot give you an
19 opinion. They can only tell you facts, and you apply the
20 facts to the law, and that's where it's your opinion that
21 counts. But an exception is made if somebody has some
22 educational or occupational or experience that entitles them
23 to give an opinion as an expert.

24 You should, first of all, test an expert's opinion
25 the same way you would any other witnesses. Is the expert

1 believable? Is there a basis for the expert knowing what he
2 or she has said? Is it a sufficient basis? Just because
3 somebody claims to be an expert doesn't mean that you have to
4 accept what they say. That's up to you.

5 I have given you a rough outline of what to expect
6 in the case and who has what burden of proof. I will give
7 you more specific instructions on the law after I hear the
8 evidence because many of the instructions depend on evidence
9 being presented to support them. So until the evidence is
10 presented, I cannot give you your full and final
11 instructions, but when I give them to you, I will give them
12 to you in writing.

13 These instructions, general instructions, we call
14 them, I give to you verbally. Most of them are common sense
15 and things that you've probably thought of yourself, but I
16 want to remind you of them because they apply in this case
17 and any contested cases to be decided by juries.

18 There are a number of patents at issue in the case.
19 People who deal with patents on a regular basis use the last
20 three numbers of the patent to describe them. That's because
21 the numbers are in the millions because that's how many
22 patents have been granted over the years. So they're not
23 going to say "Patent Number 9,994,880," they're going to say
24 "Patent Number '880," which are the last three numbers of the
25 patent. And all those numbers will be unique to that

1 particular patent.

2 Let me say a few words to you about your conduct as
3 jurors. You should conduct yourself in the same manner as
4 you would hope a judge would conduct himself or herself in a
5 trial in which you have an interest in the outcome. You
6 should not do anything that violates any of the instructions
7 the Court has given you, and you should not conduct yourself
8 in any way which calls into question your impartiality.

9 For example, you may see people whispering to each
10 other in the hall. They may be witnesses or lawyers. If you
11 see that, give them a wide berth, because that's something
12 happening outside the courtroom. Your decision is to be
13 based on what you see and hear inside the courtroom, not
14 outside. It's not a good idea to get yourself in a
15 conversation with any stranger you see around the courthouse
16 because that person may be an attorney or a witness, and even
17 if you're talking about the weather, if one side sees you
18 talking with somebody associated with the other side, they're
19 going to be suspicious, so you should avoid any such contact.

20 Now, let me tell you about the most counterintuitive
21 instructions that I'll give you at this stage of the case.
22 You may not discuss the case with your fellow jurors until
23 you begin your deliberations. You say, well, here I am on
24 the jury. Here's another person on the jury. Why can't I
25 talk to them? Two very good reasons:

1 Number one, you're not supposed to make up your mind
2 about any issue in the case until you've heard all of the
3 evidence from both sides, because you may be thinking one
4 thing at one stage of the case and something entirely
5 different at a later stage of the case. But you should not
6 share what you're thinking with other jurors until it's time
7 to deliberate. One reason is you can only discuss the case
8 when all the jurors are present.

9 And, number two, you can only discuss the case when
10 you've heard all the evidence and the instructions of the
11 Court, because something that you may believe may be
12 contradicted by an instruction of the Court, or it may be
13 contradicted by later evidence in the case.

14 Obviously, you cannot discuss the case with anybody
15 when you leave the courthouse and go home. Everyone is going
16 to be wondering what you are doing. They're going to be
17 curious about it. When someone serves on a jury, your spouse
18 and family want to know all about it. And you can tell them
19 all about it when the case is over, or you can choose not to.
20 That's up to you. But you cannot discuss it with them while
21 the case is in progress. They may make a perfectly innocent
22 statement to you that might affect you in a way that you
23 don't even realize. The only way to avoid that is not to
24 allow anybody to talk to you.

25 What you should do when you go home is not tell your

1 friends and family anything except the fact that you have
2 been chosen to serve on a jury in this court. Don't tell
3 them it's a civil case or a criminal case or anything else.
4 The best way to avoid it is to say that the Judge told you
5 you couldn't do it. You can blame it on me, but don't allow
6 your family to talk to you about it. Don't make the mistake
7 of talking to anybody about it. If you know somebody who is
8 a scientist or a chemist, don't ask them what some term
9 means. That would be just as bad as looking it up on the
10 internet; you'll get somebody's opinion of what that term
11 means. It might mean something entirely different in the
12 context of a patent than it might mean in some other context,
13 so it's worthless, and it would be a violation of your oath
14 to do it.

15 I know that's difficult, particularly in a case that
16 lasts for a while, but just remember you and I have to work
17 together to make sure that each side gets a fair and
18 impartial verdict, and we can't do that if you allow other
19 people to talk to you outside of court.

20 There's no reason why you can't have lunch with the
21 jury, with fellow jurors. There's no reason you can't ride
22 back and forth to court with other jurors, except one time we
23 had two jurors who got in an automobile accident and we lost
24 two jurors at one time, and that caused a bit of a problem.
25 If you're going to drive together, make sure you don't get

1 into an accident, but there's nothing wrong with that.

2 If somebody nods and says "hello" to you, even if
3 it's an attorney, it's okay to nod back, but just don't say
4 anything. You don't have to be impolite. Just don't allow
5 yourself to get into a conference with anybody or a
6 discussion, however brief, with anybody about the case. As
7 you can see, we're going to a lot of trouble to select a fair
8 and impartial jury, but our efforts will go for naught if
9 you, the jury, and me, the judge, don't do what we're
10 supposed to do.

11 Normally, we take a break in the middle of every
12 morning. We normally start at 10:00 in the morning and take
13 a lunch break around 1:00, take a break in the middle of the
14 afternoon, and then we adjourn somewhere 5:00 or 5:30. We
15 don't ring a bell at 5:00 and everybody leaves. It depends
16 on what we're doing. If we're in the middle of a witness,
17 we'll try to finish that witness before we adjourn.

18 On the other hand, it's hard for everybody -- it's
19 hard for me, it's hard for you -- to concentrate but so long
20 at a time. That's why we take breaks, and that's why we try
21 to confine the case to so many hours every day, just like
22 your working day. You get to a point in your working day --
23 whether you're a house spouse or whether you have a
24 complicated job, or whatever you do, you get tired at the end
25 of the day, so you become less attentive. So we try to not

1 be unreasonable about working into the night. We try to
2 adjourn by 5:30. On occasion, we might go till close to
3 6:00, but that's our normal day, is to begin at 10:00, take a
4 break in the middle of the morning, and then go to lunch.

5 THE CLERK: We have a panel.

6 THE COURT: It appears we have a jury, so I'm going
7 to ask Lori to call the names of the jury. When your name is
8 called, please come and have a seat in the jury box.

9 THE CLERK: When I call your name, please head
10 towards Mr. Spatz, and he'll show you how to get into the
11 jury box.

12 Steve LaShawn Boyser.

13 Grace Cintron-Matias.

14 Tanya Geenen Coston.

15 Sandra Lyn Daisey.

16 Audra Michelle Davis.

17 Timothy Devon Durall.

18 Sherry Lee Kelly.

19 Madelyn Bortugno Maggard.

20 Kevin Lee Mugglin.

21 Jane Ellen Reynolds.

22 You can sit anywhere you'd like.

23 Ashley Elizabeth Waldin.

24 Dawn Ann Smith Wright-Jump.

25 I'm going to call the roll one more time just

1 informally, if you could respond "present" or "here."
2 Steve Boyser.
3 JUROR BOYSER: Here.
4 THE CLERK: Grace Cintron-Matias.
5 JUROR CINTRON-MATIAS: Present.
6 THE CLERK: Tanya Coston.
7 JUROR COSTON: Present.
8 THE CLERK: Sandra Daisey.
9 JUROR DAISEY: Present.
10 THE CLERK: Audra Davis.
11 JUROR DAVIS: Here.
12 THE CLERK: Timothy Durall.
13 JUROR DURALL: Here.
14 THE COURT: Sherry Lee Kelly.
15 JUROR KELLY: Here.
16 THE CLERK: Kevin Mugglin.
17 JUROR MUGGLIN: Here.
18 THE CLERK: Jane Reynolds.
19 JUROR REYNOLDS: Here.
20 THE CLERK: Ashley Waldin.
21 JUROR WALDIN: Here.
22 THE CLERK: Dawn Wright-Jump.
23 JUROR WRIGHT-JUMP: Here.
24 THE CLERK: Members of the jury, will you please
25 stand and raise your right hand.

1 | (The jury was duly sworn.)

2 THE COURT: All right, ladies and gentlemen. We
3 normally take a recess once the jury is selected, so you may
4 step into the jury room. We'll take approximately a
5 15-minute recess.

6 (The jury exited the courtroom.)

7 THE COURT: You may be seated. Ladies and
8 gentlemen, members of the jury panel, those of you who have
9 come here ready, willing, and able to serve, you've done your
10 civic duty by showing up and being so ready, and on behalf of
11 the parties and the Court, I thank you for being here.

12 Our trials are open to the public. Anybody who
13 wishes to observe all or any part of the trial is at liberty
14 to do so today or at any day during the trial. Those of you
15 who would like to leave at this time may do so, with the
16 thanks of the Court and the parties for being here in the
17 first place.

18 So those of you who want to adjourn at this time may
19 do so.

20 (The venire exited the courtroom.)

21 THE COURT: All right. Counsel, everybody may be
22 seated.

23 I presume there's going to be a motion to exclude
24 the witnesses?

25 MR. ZAHEER: That's correct, Your Honor.

1 MR. CONNALLY: Yes, Your Honor.

2 THE COURT: Anyone who is going to be a witness in
3 the case, except for one corporate representative for each
4 corporation, will have to wait outside until they're called
5 as a witness. Those of you who are spectators in whatever
6 form, who are not going to be witnesses, may find whatever
7 seats you'd like to find in the courtroom to observe.

8 MR. CONNALLY: I believe we agreed on experts
9 remaining.

10 MR. ZAHEER: The parties agreed that expert
11 witnesses could remain for trial to observe the testimony.

12 THE COURT: If both parties agree, they may do so.

13 MR. CONNALLY: We do, Your Honor. Thank you, Your
14 Honor.

15 THE COURT: All right. I don't think we're going to
16 be able to do anything. We'll have less than 15 minutes.
17 You may have a seat. It's not necessary for counsel to stand
18 when the jury enters and leaves the courtroom. In fact, it's
19 not a good idea. We don't want to compete to curry favor
20 with the jury. Just remain standing. You do have to curry
21 favor with the Judge, however. Is there anything else that
22 we need before we begin opening statements?

23 MR. CONNALLY: Are we going to watch the patent
24 video, Your Honor? That might be a good thing to do.

25 THE COURT: Right. How long does that take?

1 MR. ZAHEER: I think it's 20, 25 minutes, somewhere
2 in that range.

3 MR. DAVIS: It's 16 minutes, Your Honor. Roughly.

4 THE COURT: Well, if we can do it in 16 minutes, we
5 ought to do it before lunch.

6 MR. CONNALLY: Agreed, Your Honor.

7 MR. ZAHEER: I think that we had our graphics person
8 leave to make room for the jury, so we need to set up in
9 order for the graphics person to display it.

10 THE COURT: Can you get it set up by a quarter of?

11 MR. CONNALLY: We can play it. It's just the --

12 THE COURT: It doesn't make a difference who plays
13 it.

14 MR. ZAHEER: That's fine.

15 THE COURT: How about the booklets for the jurors?

16 MR. ZAHEER: Booklets are ready.

17 MS. JONES: Yes, they're ready.

18 MR. CONNALLY: We're checking to make sure we're
19 ready to show the video. Let me confirm that before we
20 commit to it.

21 MR. ZAHEER: Just a couple of minor housekeeping
22 matters.

23 Your Honor mentioned on the record that there were
24 American companies on the other side. There's actually one
25 German company on the other side from us.

1 And, secondly --

2 THE COURT: BASF is a German company?

3 MR. ZAHEER: There are two BASF entities in the
4 case: One is a U.S. subsidiary, and one is the German
5 company.

6 THE COURT: Okay.

7 MR. ZAHEER: And then the second one is just that
8 there's no issue about taking fish DNA and putting it in
9 plants in this case. That's not what either of the parties
10 are doing.

11 THE COURT: I thought that was the whole purpose of
12 the patent, is to put the --

13 MR. ZAHEER: Well, we hope to provide greater
14 clarity on those issues during the trial, Your Honor.

15 THE COURT: Well, I hope so. Well, what is all this
16 stuff about mixing the fish in with the seed?

17 MR. ZAHEER: So both parties in the case take DNA
18 from algae, from microalgae, and they put it in canola
19 plants, and that's the nature of the invention. Typically in
20 a person's diet, you get omega-3s from seafood, from salmon
21 and other seafood, but the salmon don't actually make the
22 omega-3 inside their bodies, they actually eat the algae, or
23 they eat something that is eating the algae, and that's how
24 you get omega-3s in the fish.

25 THE COURT: Well, where does the algae come from?

1 MR. ZAHEER: From the sea, from the bottom of the
2 ocean.

3 MR. CONNALLY: Your Honor, I think both parties are
4 going to be talking about this in opening and explaining it.
5 I don't think there's much more to do right now.

6 THE COURT: Okay. Well, why did I think you were
7 mixing this kind of rainbow fish or whatever it was?

8 MR. CONNALLY: The ultimate product, Your Honor, is
9 used in fish feed.

10 MR. DAVIS: At one point, Your Honor, there was a
11 hearing about a zebrafish, and I think that may be what Your
12 Honor may be thinking of.

13 THE COURT: Well, what is a zebrafish?

14 MR. ZAHEER: A zebrafish is, in fact, a fish. And
15 so there was, at one point in the experimentation process,
16 some fish DNA that was used in a plant, but that was early
17 on, and both sides in their products that they have now only
18 use algae DNA.

19 THE COURT: Well, that's disappointing. I've been
20 telling all my friends how brilliant you guys were by being
21 able to combine two different -- what do we call it -- parts
22 of the planet into one product. It turns out you weren't
23 successful in that, huh?

24 MR. ZAHEER: Sorry. We'll try better next time.

25 THE COURT: Okay. All right.

1 MR. CONNALLY: We can show the video, Your Honor.
2 We are able to show it.

3 THE COURT: Okay. Anything else you want to bring
4 up?

5 MR. ZAHEER: No, Your Honor.

6 MR. CONNALLY: No, Your Honor.

7 MR. DAVIS: No, Your Honor.

8 THE COURT: Let's see if the jury is ready to come
9 in.

10 (The jury entered the courtroom.)

11 THE COURT: Ladies and gentlemen, as an introduction
12 to the case, we have a film which takes approximately 16
13 minutes to show. It talks about patents in general. It
14 doesn't talk about the patents at issue in this case, it just
15 talks about the patent system. I think it will help you
16 understand the evidence, just as I think the opening
17 statements of the attorneys will help you understand it, so I
18 would ask you to pay close attention to the film. This film
19 is generally shown to all jurors in all patent cases.

20 (The video was played in open court.)

21 THE COURT: All right, ladies and gentlemen, as I
22 mentioned to you, we normally take our luncheon recess at
23 around 1:00. It worked out that we had just the right amount
24 of time to show you that film.

25 So we're going to take our luncheon recess at this

1 time, and we'll reconvene -- let's see -- at ten minutes
2 after 2:00. You're on your own as far as lunch is concerned.
3 There are several places to have lunch. You can go out the
4 front door and turn left, and in the next block there are a
5 number of restaurants with different kinds of food that you
6 can look for.

7 It's also permissible, if you wish, to bring your
8 lunch in with you on succeeding days of the trial. It's also
9 possible that you can have lunch together as a group or not,
10 as you wish, as long as you don't talk about the case. It's
11 not as if you have that much to talk about at this point, but
12 practice up on not talking about the case so after we've
13 heard the evidence, you'll be used to doing it that way.

14 So I'll ask you to take your luncheon recess now,
15 and I'll ask you to return at ten minutes after 2:00.

16 (The jury exited the courtroom.)

17 THE COURT: All right. Anything counsel wants to
18 bring up before we take our luncheon recess?

19 MR. ZAHEER: Nothing from us, Your Honor. Thank
20 you.

21 MR. CONNALLY: Not right now, Your Honor, no.

22 THE COURT: All right. I'll see you at 2:10.

23 (Luncheon recess from 1:00 p.m. to 2:08 p.m.)

24 THE COURT: Bring in the jurors who are here.

25 (The jury entered the courtroom.)

1 THE COURT: We try to start on time, ladies and
2 gentlemen, because people get in the habit of being late and
3 it becomes a habit.

4 THE CLERK: I just heard from the jury clerk, and
5 she said there's still a long line outside.

6 THE COURT: Well, tell her to get our jurors in here
7 because we're in progress; put them at the front of the line.

8 THE CLERK: Okay.

9 THE COURT: I guess we better include the lawyers in
10 that, too.

11 (There was a pause in the proceedings.)

12 THE COURT: There were adjustments that had to be
13 made to the binders. Have they been made? No? Let's do it
14 now.

15 I mean, one side had pictures of witnesses, and the
16 other side didn't. The pictures of witnesses will be
17 removed. Let's get on that right away.

18 Also, there's supposed to be 15 binders, not 12.

19 MS. WEBB: Can I deliver those to you first thing in
20 the morning, the additional three copies, sir? By 8:00 a.m.?

21 THE CLERK: Do you want all the witness photos out,
22 or do you want to supplement?

23 THE COURT: Out.

24 THE CLERK: All out.

25 THE COURT: The pictures of witnesses out. That was

1 not part of what the Court instructed be put in the binders.

2 (There was a pause in the proceedings.)

3 THE COURT: You put in the binders what the Court
4 says put in the binders. If you want to put anything else
5 in, you get permission.

6 (There was a pause in the proceedings.)

7 THE COURT: Ladies and gentlemen, we had a problem
8 today because there's another jury being selected in a
9 different courtroom in a murder case. So instead of having
10 12 jurors, we had like 50 that were standing in line out
11 there.

12 THE CLERK: 150.

13 THE COURT: Was it 150?

14 THE CLERK: Yes, sir.

15 THE COURT: Well, that shouldn't happen again. We
16 set a time to resume, and that's the time we'll resume, and
17 counsel should know that, and the jury should know that.
18 Because if you don't do it, then you're wasting everybody
19 else's time.

20 So we'll now proceed with the opening statements,
21 with the proponent of the patent going first.

22 MR. ZAHEER: Thank you very much, Your Honor. And
23 thank you to the jury for your time and for your service.
24 Again, it's nice to meet you all. My name is Daniel Zaheer,
25 and I represent the Commonwealth Scientific and Industrial

1 Research Organisation, or CSIRO.

2 In life and in patents, you win the race by coming
3 in first. That's at least how the founders of our country
4 saw it when they set up our patent system. They wrote patent
5 protection into the Constitution, and here's their idea. I
6 think it's pretty smart.

7 Let's have a race of ingenuity. If you invent
8 something first, then you own the idea for a certain amount
9 of time. Your idea is your property, and your patent
10 protects you from having others use it without your
11 permission. The idea is if you have this race of ingenuity,
12 you will give people an incentive to come up with new and
13 great inventions and to share them with the world as quickly
14 as possible.

15 Under this system, our country has benefitted from
16 incredible technological advances and risen to the top of the
17 world in innovation. You see, there are winners and losers
18 in every patent race, but we all enjoy the benefits of the
19 system our founders set up so long ago.

20 This is a case about a race between CSIRO and a
21 German chemical company called BASF to find a biotechnology
22 breakthrough that has stumped some of the world's biggest
23 companies for years. CSIRO won that race, and the U.S.
24 Patent Office has awarded us U.S. patents on the important
25 technology that we're here to talk about today.

1 BASF lost the race, and so BASF has a patent
2 problem, a big one. You see, CSIRO did exactly what our
3 founders intended; we went to the Patent Office and disclosed
4 the incredible invention to the world, and, in exchange,
5 after a very long process, the Patent Office issued us
6 patents. You will hear that BASF and its partner, Cargill,
7 have known about our patent applications and our patents for
8 many years and knew that we had rights to these inventions,
9 but they decided that they would not play by the rules.

10 We will prove that even though they knew about our
11 patents, they decided to use our inventions anyway. That is
12 something called infringement, and because they knew that
13 they were doing it, it's something called willful
14 infringement, and that is what we intend to prove at this
15 trial. We are here today to uphold the law and to uphold the
16 system that's written into the Constitution.

17 As I told you, this case is about a technological
18 breakthrough. That breakthrough relates to important
19 nutrients in your diet that you may not even know that you
20 need. The nutrients are called omega-3s. Nowadays you see
21 omega-3s popping up everywhere; in juice, in milk, in peanut
22 butter, and in eggs. You may have also heard that
23 wild-caught fish is healthier to eat than farm-raised fish.

24 One of the reasons for that is that the wild-caught
25 fish have much higher levels of certain important omega-3s in

1 them. And you may have seen in the supermarket omega-3
2 supplements, and some of you may even take fish oil, which
3 are filled with these omega-3s.

4 And if you look closely at the screen, you will see
5 that there are particularly important omega-3s that go by
6 three letters. You will see there's EPA, and, more
7 importantly, you will also see DHA. This case is about those
8 special omega-3s.

9 So why is EPA usage so important, and why are we
10 having a whole trial about them? Well, since the 1980s,
11 doctors and researchers have found that certain kinds of
12 omegas -- again, EPA and DHA -- are important for maintaining
13 good health and preventing disease. It's been found that
14 they are very important for treating and reducing heart
15 disease, and that they're critical for brain development in
16 infants and small children. They're also found to be very
17 important in prevention and treatment of diabetes, cancer,
18 asthma, Alzheimer's, and a host of other conditions.

19 What are omega-3s? Omega-3s are what doctors call a
20 healthy fat. Omega-3s are found in food, but if you could
21 squeeze them out of the food, you would have an oil. And, in
22 fact, the technology we are here to talk about today is how
23 to make that oil. And we know how to make the oil. Let's
24 look at where it comes from in nature.

25 Most people get DHA and EPA into their diets by

1 eating seafood, but fish, however, don't make the omega-3s.
2 The ultimate source for DHA and EPA is these tiny algae at
3 the bottom of the ocean, and they're called microalgae.
4 Those tiny algae have incredible biological factors inside of
5 them that make the omega-3s, and then those omega-3 oils work
6 their way up the food chain until they end up in the fish
7 that we eat.

8 But this is where we run into a problem. You see,
9 there actually aren't enough fish in the sea to feed all the
10 people in the world and to give them these important
11 nutrients. And there are other problems, too, like the fact
12 that some wild-caught fish have chemicals in them, like
13 Mercury, that are actually harmful to your health. And if
14 you think about the fact that these important omega-3s are
15 important for infants to help brain development, you don't
16 want to be taking that from the same source that may have
17 Mercury and harmful chemicals inside of it.

18 So these are the problems that big companies and
19 scientists around the world set out to solve almost 20 years
20 ago. How can we produce more omega-3s, and how can we do it
21 safely? Our scientists at CSIRO thought of a solution. They
22 asked, what if we could take those biological factories
23 inside the tiny microalgae and we could put them in a plant
24 that grows on land, such as canola?

25 If we could do that, then we could grow all the

1 omega we need, and we could do it without any of the harsh
2 chemicals. And, not only that, if we grow it in a land
3 plant, we can put farmers to work and put some money in their
4 pockets by giving them a new and high-value crop to grow.

5 Now, having this big idea is one thing, but making
6 it work is something totally different. This was a massive
7 scientific challenge. It's been called the biology
8 equivalent of the moon shot, and some of the biggest
9 companies in the world had worked on this for years and
10 couldn't make it work. There were those that believed that
11 it wasn't even possible; that the science was too hard, and
12 that the plants would not accept it.

13 But the team of scientists at CSIRO were able to
14 succeed where others had failed. They solved the huge
15 problems, and they proved that, yes, it is possible, and it
16 can be done. For their groundbreaking work over the last 15
17 years, the inventors have been awarded several patents, and
18 we're here today to talk about seven patents in particular.

19 Now, let me go back and introduce you to CSIRO.
20 CSIRO, again, is the Commonwealth Scientific and Industrial
21 Research Organisation. I say CSIRO. You'll hear other folks
22 say C-S-IRO. You can pronounce it however you like.

23 CSIRO is Australia's national research lab. You
24 might think of it as similar to NASA or to a big public
25 research university like Virginia Tech. The Australian

1 government has set up CSIRO to solve big scientific
2 challenges and, in doing so, to put workers and farmers to
3 work.

4 Again, CSIRO is set up by the Australian government.
5 It's not a private business. It doesn't have shareholders,
6 and it isn't out to make a profit. Any money that CSIRO
7 brings in goes back to the important scientific work that our
8 scientists are doing every day. Today CSIRO's researchers
9 are working on tackling some of science's biggest challenges,
10 like combatting malaria, creating new and sustainable fuels,
11 transforming agriculture and developing new treatments for
12 diseases such as cancer. And because of its unique profile
13 and mission, CSIRO is one of the most highly respected
14 research outfits in the world.

15 CSIRO's researchers have been behind major
16 scientific work that has touched the lives of people around
17 the globe. If we go back to the 1960s, CSIRO developed
18 advanced transmission arrays that allowed people in the
19 United States to watch the moon landing live in 1969, which
20 was a very big deal back then.

21 Slightly more recently, CSIRO invented Wi-Fi, the
22 technology that allows you to stay connected wherever you go
23 and to stream TV and movies on your mobile device or on your
24 TV at home. And there are numerous other inventions, from
25 secure currency, and contact lenses, and even gluten-free

1 beer. CSIRO invented that. The omega-3s --

2 THE COURT: All of which has nothing to do with this
3 case.

4 MR. ZAHEER: Thank you, Your Honor.

5 The omega-3 challenge was as big as any that CSIRO
6 had ever faced. CSIRO was able to succeed where others had
7 failed. How did they do it? They put together a team from
8 all around Australia, specialists in different disciplines,
9 and leveraged their collective expertise to come up with the
10 best solution and the one that worked.

11 They put together leaders in plant biology, experts
12 in genetics, the best minds in oil metabolism, and people who
13 knew about how omega-3s are absorbed into our body, and very,
14 very importantly, in Tasmania, that little island at the
15 bottom of the world, CSIRO had some of the world's leading
16 experts on microalgae, those tiny factories that are at the
17 center of all of this.

18 You will meet two of the many inventors in this
19 case. First, you will meet the original leader of the
20 project, Dr. Suriner Singh. Dr. Singh is an award-winning
21 scientist who has devoted his life to the study of plant
22 biotechnology and engineering those plants to become living
23 factories.

24 You will also meet Dr. James Petrie. This project
25 goes all the way back to 2002, and at that point, Dr. Petrie

1 was coming fresh out of school and just starting his career
2 in science. You will hear that Dr. Petrie made an impact in
3 bringing new and innovative ideas to the CSIRO team and
4 eventually climb the ranks to become the leader of the
5 project.

6 Now, even with the great team, and even with the
7 breakthrough invention, CSIRO still couldn't do this on its
8 own. It still needed partners. Again, CSIRO is a government
9 research lab on a tight budget, and so it needed investment.
10 It also understood that this invention would be a
11 game-changer for farmers, so it needed to team up with
12 somebody who knew about farms and farming. To better
13 understand those needs and to get some investment, CSIRO
14 teamed up with the Grains Research and Development
15 Corporation, or GRDC.

16 Like CSIRO, GRDC was set up by the Australian
17 government. The purpose of GRDC is to represent the interest
18 of farms and farmers. When GRDC heard about CSIRO's
19 inventions, they saw the promise for farmers, and so GRDC
20 became an early investor and has been CSIRO's partner ever
21 since.

22 CSIRO and GRDC still needed one more partner.
23 Again, they are parts of the Australian government, and
24 they're not private companies. They don't own farms, and
25 they don't sell oil. They needed to team up with a farming

1 company who could make a business out of our inventions.
2 CSIRO looked at a number of companies, and, in fact, you'll
3 hear that at one point CSIRO even talked to BASF about
4 becoming a partner. We'll talk more about that later.

5 Ultimately, however, CSIRO found a true partner and
6 one that believed in the promise of CSIRO's invention. That
7 company is called Nuseed, and so Nuseed, along with it's
8 parent company, Nufarm, has been with CSIRO ever since.

9 The partnership has been a huge success. As I
10 mentioned, the work has led to numerous patents, but,
11 remember, CSIRO and Nuseed and GRDC, they weren't in this to
12 just take out a bunch of patents. What they wanted to do was
13 bring their inventions to the world and bring the important
14 health products that the world needed to market, and, here
15 again, they've been successful.

16 Nuseed was the first in the world to get approval
17 from the USDA for growing and selling its omega-3 canola oil.
18 Today Nuseed farmers are growing omega-3 canola in Montana,
19 and that omega-3 canola oil will be used to feed fish in fish
20 farms so that the farmed fish can have the same amount of
21 omega-3s as the wild-caught fish. And this should be where
22 the story ends, but it isn't.

23 You'll remember I said earlier that some of the
24 biggest companies in the world were working on the omega-3
25 problem. BASF and Cargill were two of those companies. Even

1 though CSIRO had the patents, BASF and Cargill decided that
2 they weren't going to let our patents get in the way of their
3 plans.

4 Why would BASF and Cargill decide that they weren't
5 going to respect our rights? You can probably guess, and we
6 will show that there was a lot of money to be made in this
7 market. There have been estimates that it's a \$1 billion
8 market, and you will hear evidence about that.

9 We will prove that BASF and Cargill made a business
10 decision. They decided that there was just too much money to
11 be made to let our patents stand in the way. You see, this
12 is a really tough business, and BASF and Cargill would love
13 to see Nuseed wiped out of the market so that they could have
14 it all to themselves.

15 But, again, the whole point of patents is to level
16 the playing field. Remember, whether you're a big company or
17 a small one, or even an inventor who invents something in
18 your garage, your patent gives you the right to have your
19 invention for your own and to prevent others from using it
20 without your permission.

21 Let's go back and talk about BASF. BASF is the
22 world's largest chemical company. They started working on
23 the omega-3 problem in 1998, almost five years before CSIRO
24 got started. You will hear that BASF has invested more than
25 \$200 million in its omega-3 project. But even with the

1 five-year lead, and even with millions of dollars invested,
2 BASF still saw CSIRO shoot out ahead and win the race. How
3 did BASF fall behind? Well, you'll hear that the parties
4 took very different approaches to the research that they were
5 doing.

6 BASF decided very early on that it was going to do
7 thousands and thousands of experiments in canola plants, and
8 that it would only trust the data coming from those canola
9 plants. Now, that may not sound like a big deal, but growing
10 canola and doing experiments in it is very time-consuming,
11 and it takes a lot of money. It takes almost a year to do
12 one single experiment in canola, and it also takes a lot of
13 people to grow it, greenhouses to grow it in, and fields to
14 grow it in, and plenty of other facilities.

15 CSIRO didn't have that kind of money to pour into
16 this project, so they had to do more with less. Sometimes
17 the best ideas come to those who have to make do with what
18 they have. Necessity is the mother of invention, and that's
19 exactly what happened here.

20 CSIRO's approach was different. We decided that
21 instead of working in canola, we were going to use a
22 sophisticated plant model. That's an odd term, but let's
23 think about it this way. If you're an engineer, and you're
24 trying to build a really fast jet, if you have all the time
25 and money and resource in the world, you might build a dozen

1 jets and design them all a little bit differently to see
2 which one flies the fastest.

3 But if you're on a limited budget, you might come up
4 with a computer model where you can simulate how the jet
5 flies under different design conditions, and then once you've
6 designed it perfectly in the model, you can take it out and
7 then only build the jet once.

8 Well, CSIRO didn't have a computer model to make its
9 invention, so what it did is it used certain plants, and it
10 invented new ways of testing those plants so that they can
11 simulate what their inventions would do in canola. And using
12 that approach, the evidence will show that CSIRO won the
13 race.

14 Again, CSIRO and Nuseed were the first to market,
15 and they beat out Cargill and BASF. And any way you look at
16 it, if you go into the field today, CSIRO has found superior
17 results. You will hear that our plants have higher levels of
18 the every important omega-3 DHA, and we've also developed
19 plants that have high levels of the very important omega-3
20 EPA.

21 Now, as I mentioned earlier, there's one more very
22 important part of the story. You will hear that around 2008
23 BASF and CSIRO sat down to see if they might do better by
24 working together than being competitive. And CSIRO was
25 excited. It needed a commercial partner, and it needed

1 investment. CSIRO thought that if BASF and Cargill partnered
2 up that they could collaborate with each other, and they
3 could use the great ideas on both sides, and they could join
4 forces and win the race together. BASF was excited, too.

5 You will hear evidence that, despite all the time
6 and money that BASF had spent, it was still having problems
7 working out the science behind getting high levels of DHA in
8 their canola. You will see documents that say that they
9 formed the relationship with CSIRO to secure new sources of
10 genes in order to get DHA.

11 So when the parties came together on each side, they
12 exchanged information. CSIRO opened up its books and told
13 BASF about all the research that we were doing. We told them
14 about where we thought this was going, what we thought
15 worked, and what we thought didn't work.

16 BASF, likewise, gave us information that we found
17 very valuable, and you will see evidence that on both sides
18 BASF was very appreciative of the information that we gave
19 them and that they thought that our contributions were
20 significant. You will hear evidence, also, that CSIRO
21 thought that BASF gave us a lot of data, and we found great
22 value in seeing that data.

23 You will also hear that at the end of this process
24 BASF and CSIRO sat down to figure out what to do next. And
25 this is a very critical point in this case. BASF came to us,

1 and they told us they had an interest in commercially
2 licensing our technology on an exclusive basis. That means
3 that they wanted to buy our technology that was patented and
4 that they wanted to have that all to themselves; that nobody
5 else could use it.

6 CSIRO responded with a clear message: Look, we're
7 in this for the long haul. We're not going to sell off our
8 technology. We're looking for a partner, somebody to join up
9 with. If you become our partner, we'll give you access to
10 all of our technology, and you'll be able to use it however
11 you want, together with us. But if you are not a partner,
12 then you're a competitor, and we're not going to sell out our
13 technology.

14 The evidence will show that BASF had a very
15 important decision to make. They could either become our
16 partner and get access, or they could turn it down and not
17 have access to our technology. BASF turned down the deal and
18 went their own way, and that's one of the reasons why we're
19 here today.

20 Eventually, BASF teamed up with Cargill, a big
21 agriculture company, to grow and sell its omega-3 canola oil,
22 but all along Cargill and BASF knew that they had a problem.
23 They knew that they had a problem with our patents. And
24 then, as they were coming close to going to market, they came
25 face to face with a problem that they knew that they had been

1 facing for years. In short, the evidence will show that BASF
2 and Cargill had dug themselves in a huge hole. And what did
3 they do? Well, it's America, folks. They sued us.

4 We will prove that they knew that they were
5 infringing our patents, so they sued CSIRO to ask a jury like
6 yourselves to dig them out of the hole that they were in, and
7 so that's why we're in this case today.

8 During this trial, you will be asked to decide four
9 issues, and they're up on the screen there. And we'll go
10 through them in detail throughout the trial, and I'll have
11 another opportunity to talk to you about it.

12 Let's talk about what you will hear from BASF and
13 Cargill. The evidence will show, and you will hear, that
14 they've made excuses, and that when their excuses don't work,
15 they will try to confuse you. In fact, the biggest problem
16 for BASF and Cargill is that they've never been able to get
17 their defenses straight. You will hear that in this very
18 case they have changed defenses over and over again, and they
19 simply can't figure out what excuse is going to work.

20 First, they are going to tell you they don't
21 infringe, but when that doesn't work, they will say, well,
22 maybe we do infringe, but it wasn't willful; we didn't know
23 that we were infringing. When that doesn't work, either,
24 they will switch over and say, You know what? The patents
25 aren't worth the paper that they're written on; they're

1 invalid. And when that doesn't work, they will tell you
2 that, You know what? We're the true inventors of the
3 patents. Whichever way they turn, the evidence will show
4 that there's no basis whatsoever for any of their arguments.
5 We will prove that they are liable for infringing our
6 patents.

7 So let's talk briefly through each of these issues.
8 Infringement is the question of whether they used our
9 technology and our patents. You will hear that when this
10 case began, BASF and Cargill denied infringing all of our
11 patents, every single one. But then, just a few weeks ago,
12 you will hear that BASF and Cargill had to come clean, and
13 they submitted a stipulation to the Court that they admit
14 that they used our invention.

15 What does that mean? That's lawyer talk for them
16 admitting that they infringe our patents. And they made that
17 admission with regard to six of the seven patents that are in
18 issue, and we will prove that that seventh patent is also
19 very clearly infringed.

20 Then we will move on to the question of willful
21 infringement. You will hear that after BASF and CSIRO split
22 up and BASF decided not to partner up with us that they kept
23 a very close eye on our patents and our patent applications.
24 You will hear that as each new patent application and each
25 new patent became public, they were watching, and they were

1 reading it immediately, and you will see documents that show
2 that their experts were analyzing our patents as they came
3 out.

4 You will also hear that they were watching what we
5 were doing on the scientific side. They were going to
6 conferences and watching our presentations made by our
7 inventors and taking pictures of the PowerPoint presentations
8 that we gave, and then they were running back to their hotels
9 to type up what they called valuable intel about the
10 developments that we were making.

11 You will also hear that they were doing what they
12 could to try to put pressure on our business. They were
13 trying to spook our financial partners and put pressure on us
14 to get out of the race. So at the end of the process we will
15 prove that, yes, they did know that they were infringing our
16 patents, and they knew about it all along.

17 Next we will go to the issue of invalidity, and they
18 will claim that the Patent Office made a mistake. In fact,
19 they will claim that the Patent Office made a mistake over
20 and over and over again with regard to all seven of the
21 patents that we have in this case. That's something called
22 invalidity, and they will tell you that all of these
23 inventions -- all of them -- are obvious, but we will prove
24 that there's no basis for that argument, either.

25 First, we will show you that they waited ten years

1 to -- excuse me.

2 First, we will prove that if these inventions were
3 so obvious, then why didn't BASF and Cargill win the race,
4 and why did BASF, with a five-year lead and \$200 million to
5 spend, fall behind in terms of their products and in terms of
6 our patents being issued?

7 So when obviousness doesn't fly, we will go to the
8 question of inventorship, and this is going to be the biggest
9 turn of all. BASF and Cargill will tell you, Forget about
10 all that stuff about the patents being invalid and obvious.
11 Actually, these are really, really good inventions,
12 incredible inventions. They will tell you that these
13 inventions are so good that there's no way that CSIRO could
14 have ever invented it by itself. They will tell you that
15 they are, in fact, the true inventors of the patents. If
16 your head is spinning and you're confused, then that's not a
17 mistake. The very reason for this argument, we will prove,
18 is to confuse you. And you won't be fooled.

19 For one thing, you will hear that BASF waited ten
20 years before it claimed that it was the true inventor of our
21 patents. And, remember, BASF was watching all of our patent
22 filings and reading them closely. How could they read all
23 those patent applications and never say a word to us about
24 our stealing their inventions?

25 Let's also not forget that BASF sued us in 2017 to

1 try to counter our patents, and when they brought that
2 lawsuit, they never said a word about any of this
3 inventorship stuff. Look, BASF has tons of smart lawyers on
4 their side, you will see, and if they couldn't come up with
5 it in 2017, that means that there was no basis and no
6 evidence to support the argument then.

7 Here's another way how you will know that they're
8 trying to trick you: If you look at their allegations, this
9 is what they will say. This is what you will hear from them.
10 They will tell you that in 2009 they gave us the idea for an
11 invention that we filed with the Patent Office in 2004. Let
12 me say that again.

13 They will tell you, and their argument will be, that
14 in 2009 that they gave us an idea for an invention that we
15 filed with the Patent Office in 2004. It doesn't make any
16 sense. BASF does not have a time machine, and their
17 arguments have no evidentiary basis.

18 The last way that we will demonstrate that there's
19 no basis to this argument is we will look at the patents.
20 The patents in this case are hundreds of pages long, and you
21 will hear that throughout this lawsuit we have asked them
22 over and over again, If you think that you're an inventor on
23 this patent, then show us. Show us somewhere in this patent,
24 one page, one experiment, one line that you say is yours,
25 that you say is your invention that we took from you. The

1 evidence will show that at no point in this litigation have
2 they ever come forward and been able to do that. Not a
3 single word in any of these patents is anything that BASF
4 attributed.

5 So, whichever way they turn, the evidence will
6 demonstrate that BASF and Cargill are infringers and that
7 they knew that they infringed. Again, thank you very much
8 for your time and for your service to this case, and we look
9 forward to talking to you more about it later.

10 MR. CONNALLY: Your Honor, may our tech man approach
11 to swap the video over?

12 (There was a pause in the proceedings.)

13 MR. CONNALLY: Ladies and gentlemen, through more
14 than two decades of intense scientific work and more than
15 \$200 million of investment, BASF made a remarkable and
16 important innovation. BASF developed canola plants that make
17 critical nutrients for human health, omega-3 fatty acids.

18 As Mr. Zaheer just told you, an Australian research
19 organization called CSIRO is going to try to convince you
20 that they were the ones to first get omega-3 from canola, and
21 that no one else should be able to sell omega-3s, oil made by
22 canola plants, in the United States. CSIRO and Nuseed will
23 try to convince you that BASF and Cargill should pay -- they
24 should pay -- CSIRO and Nuseed for the privilege of selling
25 their own innovations.

1 But here's what Mr. Zaheer did not tell you. Here's
2 what the evidence is going to show: CSIRO didn't invent
3 canola plants to make omega-3s. BASF got omega-3s from the
4 Brassica plant, the scientific name for the canola family,
5 way back in 2004, long before CSIRO. CSIRO couldn't get
6 canola plants to make a drop of oil with DHA or EPA, not one
7 drop, until five years later, in 2009. And CSIRO could only
8 get these omega-3s from the canola plant after, after it
9 learned how to do so from BASF in a research collaboration
10 with BASF that started in 2008.

11 CSIRO and Nuseed's own internal documents will show
12 you that they're trying to get a strangle hold on an entire
13 area of groundbreaking new biotechnology.

14 We'll show you that CSIRO was gaming the U.S. patent
15 system; filing overreaching patents, claiming that they had
16 invented the way to get omega-3s from canola when they
17 couldn't do it. They couldn't do it.

18 It was only after collaborating with BASF that CSIRO
19 got past its years of failure and was finally able to get EPA
20 and DHA omega-3s from canola. But then, as we'll show you,
21 after collaborating with BASF from 2008 to 2010, they stabbed
22 their research partner in the back. They filed patent after
23 patent specifically targeting BASF's innovations, and CSIRO
24 did so intentionally, aiming to cover its competitor's
25 activity to impede intellectual property leverage, rather

1 than to protect anything they had really invented.

2 I'm Tom Connally. With my partners, Arlene Chow and
3 Anna Shaw, we're going to prove these things to you. Now, we
4 thank you for listening to us, and we thank you for your
5 service. We know you have jobs. We know you have
6 commitments. We know you have a billion things you'd rather
7 be doing than listen to us talk about long-chain
8 polyunsaturated fatty acids. We get it. But your service as
9 jurors is vital. It's vital to the integrity of our patent
10 system, and we thank you.

11 Now, we present our case with Dr. Carl Andre, BASF's
12 manager of its omega-3 canola project, sitting right there,
13 as well as Dr. Joerg Bauer, another one of BASF's
14 world-leading scientists, who help invent this break-through
15 technology.

16 But mainly, as you'll see, we'll prove a lot of our
17 case from CSIRO's and Nuseed's own documents, those documents
18 they created. They'll show you what is really going on here.

19 Now, as Judge Morgan explained, the trial is going
20 to proceed in phases. First, Mr. Zaheer and the other
21 lawyers from CSIRO and Nuseed and GRDC, they're going to try
22 to tell you that CSIRO invented the way to get omega-3s from
23 canola. We will show you that's not true; that BASF tested
24 it first. Then they're going to talk about these patents in
25 your book, and they'll ask you to find that BASF and

1 Cargill -- their omega-3 canola infringes these patents.

2 Then there's the second phase of the case, and
3 that's our turn, Mr. Davis and me. This is the good part,
4 and I'm sorry you're going to have to wait a couple days for
5 it. We're going to show you that because CSIRO and Nuseed
6 claimed inventions with canola they had been sued, because
7 they failed to follow the patent rules, and because they kept
8 key information from the Patent Office, they've got no right
9 to claim these inventions, and they can't enforce these
10 patents against BASF and Cargill.

11 We're also going to show you that after more than
12 five years of failure, CSIRO only learned how to get omega-3s
13 from canola by collaborating with BASF. Under the contract
14 governing that collaboration, called the Materials Transfer
15 and Evaluation Agreement, a contract you will hear called the
16 MTEA, BASF is a co-owner of patents based on the joint
17 results of the collaboration. And because BASF is a
18 co-owner, and because CSIRO didn't disclose its collaboration
19 with BASF to the Patent Office, CSIRO can't enforce these
20 patents against BASF and Cargill.

21 Now what's worse -- what's worse -- as we'll show
22 you, CSIRO took what it learned in the collaboration from
23 BASF's research and then used it to file patent after patent
24 specifically targeting BASF's innovations and BASF's
25 products.

1 Now, you heard Mr. Zaheer make a big deal out of the
2 fact that BASF and Cargill -- they don't contest that their
3 products use a lot of the technology covered by CSIRO's
4 Nuseed's patents. That misses our point. These patents are
5 invalid and unenforceable. Of course, many of CSIRO's and
6 Nuseed's patents cover Cargill's and BASF's products. That's
7 why they were created. They were created. They were
8 specifically designed to target our innovations, not to
9 protect CSIRO's own work.

10 CSIRO and Nuseed, their commercial product, it
11 doesn't even use the technology claimed in these patents. I
12 will say that again. CSIRO and Nuseed, their omega-3 canola
13 product, it does not use the technology that CSIRO and Nuseed
14 claim to invent in these patents in your books.

15 So, after we show you all that, we're going to ask
16 you to tell CSIRO and Nuseed and their funder, GRDC, that
17 they can't profit from overreaching, they can't profit from
18 backstabbing, and they can't profit from their failure to
19 follow the patent rules.

20 Let me back up and tell you a little bit about my
21 client. BASF is a world-wide chemical and agricultural
22 science company. What they make through advanced chemistry
23 are innovations and materials that they then deliver to
24 manufacturers and farmers, the manufacturers and farmers who
25 then make and grow the things that we use every day, from

1 airplanes, to plastic containers, to, in this case,
2 innovative new crops. As BASF's old ad campaign used to say,
3 at BASF we don't make a lot of the products you buy, we make
4 a lot of the products you buy better.

5 And one of the key ways that BASF makes things
6 better is by focusing on sustainability and preserving the
7 environment, which is central to BASF's innovation we are
8 talking about here. The world population is approaching
9 9 billion people, all of whom need food to live. At the same
10 time, the challenges farmers face in feeding us all are more
11 complex and uncertain. BASF is helping meet these challenges
12 through science, developing better crops for farmers so they
13 can feed our hungry planet.

14 Now, to bring its groundbreaking canola to market,
15 BASF is working with Cargill, a great American company
16 helping to nourish the world. My friend, Mr. Davis, is going
17 to tell you about Cargill's expertise and proven track record
18 of taking scientific advancement in plants and further
19 breeding them into crops and seeds that really work for
20 farmers.

21 So let's talk specifically about BASF and Cargill's
22 innovation here. We all need omega-3 fatty acids in our
23 diet, particularly children and pregnant women. You've
24 probably all seen these omega-3 labels at the grocery store.
25 Two specific kinds of omega-3 acids are critical to human

1 health. The first is EPA, which helps brain development and
2 also protects against heart disease, which is why some
3 people, like me, take fish oil pills.

4 The second kind is DHA, which helps with both brain
5 development and eyesight. EPA and DHA, these are the two
6 critical omega-3s. The richest source of EPA and DHA is
7 fish. Salmon, mackerel, herring, these types of fish all
8 have lots of EPA and DHA. That EPA and DHA is actually made
9 by algae in the ocean, and the algae is then eaten by smaller
10 sea creatures and smaller fish and travels up the food chain
11 to the larger fish we eat.

12 The problem is, with 9 billion people on the planet,
13 the oceans can't keep supplying enough wild fish to give us
14 all the omega-3s we need. Now, you might ask yourself, What
15 about fish farming? This is a great question. Fish farming
16 certainly is part of the answer here, but the problem is in
17 order to get farmed fish with lots of these omega-3s, you've
18 got to feed them other wild-caught fish that grew up in the
19 algae-eating food chain and themselves have omega-3s.

20 Taking all those feeder fish from the oceans isn't
21 sustainable, either, and fish feed made from crops like corn,
22 that doesn't give farmed fish the omega-3s we need. Until
23 now.

24 So what's the answer BASF developed? Getting EPA
25 and DHA omega-3 from canola, a crop that already produces

1 much of the vegetable oil we use in our food today. BASF
2 figured out how to take genes from ocean algae and other
3 plants and use them to get canola to produce oil that's rich
4 in EPA and DHA. You can take that omega-3 oil and put it in
5 fish feed so that farm-raised fish have the same health
6 benefits as wild-caught fish.

7 Here's a sample slide of what we're talking about.
8 You have a canola plant, which, through BASF's innovation, is
9 genetically modified to produce seeds with EPA and DHA
10 omega-3 fatty acids. You extract that omega-3 oil by
11 crushing the seeds, just like you would regular canola oil.

12 Now, how did BASF make this remarkable innovation?
13 How did BASF get EPA and DHA omega-3 oil from canola plants?
14 Through years of hard work and more than \$200 million of
15 investments. Starting long before 2000, BASF brought its
16 world-leading crop development next to seeds and its top
17 scientists to the project. Through years of hard work and
18 investment, BASF got EPA and DHA omega-3 acids from a
19 Brassica plant back in 2004.

20 Now, around the same time that BASF got omega-3s
21 from the crop plants, this academic research organization in
22 Australia, called CSIRO, was also working to get omega-3s
23 from plants. But back in 2003 CSIRO was not working with a
24 commercial crop like BASF. CSIRO was working with a much
25 simpler plant called Arabidopsis. It grows fast, it

1 reproduces quickly, it's easy to work with. Arabidopsis is
2 like the lab rat of plants.

3 Now, BASF was well past that point in its own
4 research and development. BASF had already gotten the
5 Arabidopsis to produce omega-3s way back in 2002. By 2004,
6 the scientists at BASF were working with Brassica, a real
7 crop that farmers can grow to produce omega-3 oil on a
8 commercial basis, while the academics at CSIRO were still
9 working with the lab rat plant, a plant farmers don't grow
10 and a plant that was never going to produce omega-3 oils on a
11 commercial basis.

12 Now, CSIRO obviously recognized the potential of a
13 commercial crop that produces omega-3s, so CSIRO ran into a
14 wall, taking its lab rat research and developing a commercial
15 crop. For years -- for years -- CSIRO tried to get omega-3s
16 from canola. From 2004 until the end of 2009, CSIRO couldn't
17 get a canola plant to produce a drop -- not one drop -- of
18 oil with EPA or DHA omega-3s. So what did CSIRO do to get
19 over this hurdle? It teamed up with the leading experts in
20 the field, the ones who had actually gotten the omega-3s from
21 canola.

22 In 2008, CSIRO entered into a joint research
23 collaboration with the scientists at BASF. Why? Well, you
24 can see why right here, from CSIRO and Nuseed's own meeting
25 notes. They believed they were saving as much as two to

1 three years of time working with BASF, and they would gain
2 certainty. Now, why would they gain time? Why would they
3 gain certainty? Because BASF is someone who has done it.
4 BASF had gotten omega-3s from canola, and, as the evidence
5 will show, that's just what CSIRO got in the collaboration,
6 BASF's know-how to actually get omega-3s from canola. After
7 five years of failure, after learning how from BASF, CSIRO
8 finally got omega-3s from canola in late 2009. Now, this is
9 a timeline that we created to help you understand the
10 evidence, but let me show you one that will be evidence.

11 This is a slide presentation given by one of CSIRO's
12 own scientist way back in 2010. I've only added the
13 highlighting. This tells you what you need to know. Here's
14 when CSIRO claims to have invented the way to get omega-3s
15 from canola, their so-called proof of concept, based on their
16 Arabidopsis results, their lab rat plant work.

17 Here's the collaboration with BASF, when they
18 actually learned how to get omega-3s from canola, and here's
19 when CSIRO finally got its first canola results, in late
20 2009, and those results were joint results using BASF
21 technology and BASF genes.

22 And again, this is not my exhibit. This is not my
23 exhibit. I've got to thank CSIRO for creating this great
24 evidence way back in 2010, making one of our key points so
25 clearly; that CSIRO claimed to have invented the way to get

1 omega-3s from canola in 2004, but they couldn't actually do
2 it until 2009, when they did it working with BASF.

3 Now, as it turns out, CSIRO didn't have anything to
4 offer BASF in the collaboration. After more than a year of
5 evaluation, it became clear to BASF that its own genes were
6 better, so BASF let the collaboration contract expire by its
7 terms in 2010, without entering into a further development
8 partnership with CSIRO.

9 What did CSIRO do? After BASF decided it wasn't
10 interested in further collaboration, CSIRO filed a flurry of
11 patents specifically targeting developments in canola that it
12 knew belonged to BASF, including the key patents in the
13 books, in your books, that they're suing on. Those patents
14 specifically targeted BASF's innovations, they were filed in
15 2016 and 2017 and only issued in 2018. Through the
16 collaboration under the MTEA contract, CSIRO got the benefit
17 of BASF's know-how in canola and an up-close look at the
18 research.

19 We'll show that CSIRO then filed for patent after
20 patent that claimed inventions that CSIRO never actually
21 achieved on its own but, instead, were based on joint results
22 of its collaboration with BASF and were, thus, jointly owned
23 under that MTEA collaboration contract.

24 And, again, CSIRO and Nuseed didn't file these
25 patents to protect their own product. CSIRO's and Nuseed's

1 planned product doesn't use the technology in these patents
2 they've given you. And we'll show you CSIRO and Nuseed filed
3 these patents in your book aiming to capture a new market not
4 through hard work and investment but, rather, by gaming the
5 patent system.

6 Now, you may think to yourself, that's a pretty
7 serious accusation; you better have some proof. Well, let's
8 look again at one of CSIRO's and Nuseed's own documents.
9 Here's a memo from a meeting in 2014 of the CSIRO and Nuseed
10 omega-3 management committee. They talk about their patent
11 strategy and their need to war-game the commercial spaces in
12 the oil and the enrichment process -- war-game.

13 That's what most of these patents in your book are,
14 the result of CSIRO and Nuseed's patent war-gaming to try to
15 capture and claim ownership of the commercially viable traits
16 of omega-3 canola only, not to protect any innovation they
17 actually achieved on their own.

18 Now, it's going to be our turn to present all this
19 evidence about CSIRO and Nuseed's conduct and failure to
20 follow the patent rules in a couple days, so unfortunately
21 you're going to have to wait for the good stuff.

22 Now, before I tag off to Mr. Davis, I will end by
23 saying that while BASF is the innovator here, BASF is not
24 asking for a patent monopoly or royalties. BASF is going to
25 make its money the old fashioned way; through hard work,

1 investment, competition. BASF is not afraid to compete with
2 CSIRO and Nuseed's product in the U.S. All BASF will ask you
3 for is freedom, the freedom to bring the fruit of its hard
4 work and its investment to market, this groundbreaking new
5 canola product that the world needs.

6 MR. DAVIS: May I ask how much time I have left?

7 THE LAW CLERK: I have 11 minutes, 42 seconds.

8 MR. DAVIS: We call such unlawful use infringement.
9 That's what Judge Fogel said in the video that you watched
10 right before lunch.

11 Timing matters. Timing in this case is going to be
12 critical, and I want you to think about, as you begin to hear
13 the evidence, the timeline that you saw from Mr. Connally.
14 The key is unlawful use is infringement, and, as you heard
15 the Judge say at the beginning of the day, it's not unlawful
16 to use a patent that, in fact, you own. It's not unlawful to
17 use, in fact, a patent that is invalid. And it is most
18 certainly not unlawful to use a technology for which a patent
19 has not issued yet.

20 My name is Ahmed Davis, and, as you heard this
21 morning, I'm honored to be here before you, with my
22 colleagues from Fish & Richardson, on behalf of Cargill. We
23 stand with BASF in this matter against CSIRO, GRDC, and
24 Nuseed. I want to clear something up right now, because I
25 think Mr. Zaheer misspoke in his opening when he said that

1 Cargill filed this lawsuit.

2 Cargill did not file this lawsuit. And as we go
3 through, you will understand that it was CSIRO and GRDC and
4 Nuseed that brought Cargill into this lawsuit, and now that
5 Cargill is here, it is standing with BASF to defend what is
6 rightfully BASF's and what was rightfully done by Cargill.
7 So in the time that I have left, let me talk to you briefly
8 about who Cargill is and what the evidence will show.

9 Cargill is a company that was founded just over
10 150 years ago, originally in Iowa. It's now headquartered in
11 Minnesota, but it's got activities all over the world. There
12 are over 155,000 employees, located in 70 countries. And
13 Cargill does a number of different things that you-all are
14 aware of, but what is specific to this case is Cargill's
15 specialty seeds and oils division. That's the division where
16 the omega-3 fatty acid work has been done. In that division
17 alone, Cargill has over 130-plus employees, that are located
18 in three countries, with over 25 years of experience in this
19 field.

20 The evidence will show, in fact, that there was a
21 time when CSIRO approached Cargill and was interested in
22 working with Cargill to take advantage of the benefits that
23 Cargill had in this field, in developing and working with
24 seeds and canola and all of the things that Cargill could do.
25 But Cargill, you will hear from one of the witnesses,

1 Mr. Loh, chose to work with BASF, because Cargill believed
2 that BASF was the better company to work on the traits that
3 are involved in this technology, to work on the deregulation
4 that is involved in this technology, and ultimately to bring
5 this product to market.

6 Cargill is both active throughout the world, but, in
7 particular, in Great Falls. You'll hear that Cargill does a
8 lot of the work in this case in Montana. And a couple of the
9 folks you see there in that picture on the screen who were
10 building Habitat For Humanity are going to come and they're
11 going to speak to you about what it is that Cargill does, so
12 I want to introduce you very briefly to some of the witnesses
13 that you'll hear from.

14 In the upper left-hand corner, that is a gentleman
15 named Mark Christiansen. He's the Managing Director of the
16 Specialty Seeds and Oil Division. He will talk to you about
17 who Cargill is as a company and what they do.

18 In the upper right-hand corner, that's Dr. Willie
19 Loh, and he was involved very early on in discussions with
20 both CSIRO and BASF to determine which path Cargill will
21 take, and he'll explain to you why it is that Cargill chose
22 BASF and its technology rather than CSIRO and its technology.

23 In the lower right-hand corner, you'll see a
24 gentleman who is named Keith Horton. Mr. Horton is an
25 agronomist in Montana, and he works with the farmers in

1 Montana to help test the seeds that Cargill has been working
2 on, and he'll talk to you about some of the seeds that have
3 been grown over the last few years and the traits that
4 Cargill has been cross-breeding to maximize both BASF's
5 technology and the canola technology that Cargill has.

6 And, finally, in the lower left-hand corner is
7 Dr. Dmitry Gromov. You will hear from Dr. Gromov about the
8 market in which these products will exist and what it is that
9 Cargill brings to that market and why it's important.

10 Just very briefly, you heard some of this from the
11 plaintiff, but the demand for omega-3s is rising, and the
12 fish themselves aren't able to meet that demand, and so
13 there's an ongoing growth for aquaculture, which is the field
14 in which these seeds are grown. The innovative alternatives
15 that Cargill and BASF have developed relate specifically to
16 these omega-3s that increase DHA and EPA that Mr. Zaheer
17 discussed.

18 I think you saw a picture similar from the other
19 side, but this is a fish farm, in which Cargill does farming
20 research with salmon in Vancouver, British Columbia, again to
21 increase the opportunities to grow the favorable technology
22 that Cargill has. And what's critical for you to understand
23 is that, in fact, Cargill's omega-3 hybrids are equivalent
24 to -- excuse me. A 160-acre field of Cargill omega-3 hybrids
25 are equivalent to 1.7 million pounds of wild fish. This is a

1 technology that has incredible benefits, and it's a
2 technology that this country needs and that the world needs.

3 You're going to hear from Cargill's witnesses
4 specifically about the development process and what BASF
5 brought to the table and what it is that Cargill brought to
6 the table, particularly with respect to Cargill's contract
7 production, Cargill's seed production, their plant breeding,
8 the things that Cargill brought to the table that increase
9 the overall ability of BASF and Cargill to do a wonderful
10 job.

11 Now, what you see here is a crop innovation center
12 from Cargill that's in Great Falls, Montana. That's where
13 the work that Mr. Horton does, that you will hear from, and
14 the Montana field trials -- excuse me.

15 The Montana field trials that Mr. Horton is going to
16 talk to you about will talk specifically about the 2018 seeds
17 and 2019 seeds that Cargill planted, grew, and is now
18 planning to commercialize as a latitude product.

19 You heard Mr. Connally say that BASF was an
20 innovator. Cargill was an innovator as well, and you'll hear
21 from both Mr. Horton and Dr. Lo h that Cargill took the --
22 what you'll hear referred to as the Elite Event from BASF and
23 continued to work and increase that technology through
24 something called the Boost Program or Project Boost. And
25 what the purpose of that program is is to increase the amount

1 of EPA and DHA that's in the omega-3 product. And, as you
2 see there at the bottom of this slide, "Cargill has
3 identified propriety genetics that will increase the EPA and
4 the DHA production over 100 percent, approximately, in the
5 next four years and 250 percent in the next six years." And,
6 so, Cargill and BASF, working together, have demonstrated
7 that the technology that they have is superior and that what
8 they have done is appropriate in this circumstance.

9 Now, why is Cargill here? In 2016, Nuseed, one of
10 the parties that the Judge referred to as the proponent of
11 the patent, sent a letter to Cargill advising them of certain
12 patents and inquiring of them whether they wanted to talk
13 about licensing. None of those patents that they identified
14 to Cargill are at issue in this case. Let me say that again.
15 None of those patents that they identified for Cargill are at
16 issue in this case.

17 I believe what Mr. Zaheer said -- and I want to make
18 sure I got this right -- was that all along BASF and Cargill
19 knew they had a problem and that BASF and Cargill weren't
20 going to let their patents get in the way of our plans. As
21 you're listening to the testimony, as you're listening to the
22 evidence, I want you to pay particular attention to when the
23 patents at issue in this case were filed, when those patent
24 applications were filed. There will be a lot of discussion
25 about things that were happening in 2003 and 2004 and 2005

1 and beyond, but the patent applications that were actually
2 filed in this case, all but one of them, came after the key
3 critical work that BASF and Cargill had done related to the
4 latitude omega-3 product. Timing matters.

5 Lastly, before I close, let me say this:

6 Mr. Zaheer said this was a race. We don't believe
7 it's a race. We don't believe it's a race at all, but what
8 we do believe is that timing is critical. So as you consider
9 the evidence that you're going to hear, please keep this in
10 mind, ladies and gentlemen:

11 There are going to be documents and information and
12 testimony that was generated before this case ever began,
13 internal documents before this case ever was filed, in which
14 there were communications between the parties and there was
15 no lawsuit.

16 THE LAW CLERK: Time.

17 MR. DAVIS: May I finish that one thought, Your
18 Honor?

19 THE COURT: Yes.

20 MR. DAVIS: Thank you.

21 And, so, as you look at that information, ladies and
22 gentlemen, consider whether, when someone says something
23 different here than they did in documents before this lawsuit
24 ever began, what it is that you should believe.

25 We thank you for your time. Thank you.

1 THE COURT: Okay. Ladies and gentlemen, you will
2 recall that very early in the case, the Judge, me, told you
3 that everybody is entitled to a fair and impartial trial in
4 this court. Now, all of the attorneys have talked about
5 their companies and all of the things that they have done,
6 and it's to be expected that they would want to identify who
7 they are, but that really doesn't make any difference in this
8 case.

9 I've heard companies referred to as big companies,
10 as nonprofit companies. I think the proponents talked about
11 two nonprofit companies and then a third company, which they
12 didn't call a nonprofit company, which maybe is a profit
13 company. I don't know if they are or not, and I don't care,
14 because it's irrelevant to this case.

15 I understand that one company, BASF, which I refer
16 to as an American company -- I think somebody called them a
17 worldwide company. That doesn't make any difference. I
18 think they do have offices in Germany and in the U.S. That
19 doesn't make any difference in the case. That's got nothing
20 to do with it. The size of the company is not involved. The
21 same applies to Cargill. And when people refer to people,
22 somebody else, as a big company or a little company or a
23 nonprofit company or a for-profit company, all of that is
24 irrelevant to your decision in this case.

25 Your decision should be made as if both parties --

1 and I refer to them in groups -- as if both the proponents
2 and the opponents were citizens of the community who are
3 entitled to the same fair treatment. That's the way they
4 should be treated, and we don't need any more reference to
5 what country somebody originated in or what the size of the
6 company is or whether they make a profit or don't make a
7 profit. I've heard more about that already than I want to
8 hear, and I don't want to hear any more.

9 All right. It was confusing to me, studying this
10 case, all these names, all these different companies going in
11 different directions. It's hard to keep them straight in
12 your mind -- at least it was for me -- and that's why I'm
13 calling them the proponents over here, saying it's a good
14 patent which is enforceable, and the opponents over here
15 saying, the patent is not enforceable because it's not a good
16 patent or because they own part of it.

17 So you've got the proponents and the opponents. I
18 think it will help you understand the evidence better -- it
19 did me -- to think of them in those terms, rather than try to
20 think is this BASF or Nuseed or Cargill or CSIRO, or
21 whatever. Just think of them as the proponents and the
22 opponents.

23 All right. With that, the proponents have the first
24 opportunity to present the evidence. What I'm going to try
25 to do today, because we lost a little time at lunch time, is

—Zacharias, B. - Direct—

1 just to go until 5:00 without taking a break. If you need a
2 break, let us know, and we'll take one, but if we can make it
3 to 5:00 without taking a break, we can regain some of the
4 time we lost at lunchtime.

5 So let's go ahead.

6 MR. MENCHEL: Your Honor, we call Nuseed's Brent
7 Zacharias to the stand.

8 THE COURT: All right.

9 (The clerk administered the oath.)

10 MR. MENCHEL: Ladies and gentlemen, my name is Matt
11 Menchel, and I, as His Honor said, represent the proponent in
12 this case. I think that's a good way to do this.

13 BRENT ZACHARIAS, called by Nuseed, having been first
14 duly sworn, was examined and testified as follows:

15 DIRECT EXAMINATION

16 BY MR. MENCHEL:

17 Q. Sir, what is your name?

18 A. Brent Zacharias.

19 THE COURT: I'm sorry. I'm a little hard of
20 hearing. I don't know how adjustable that microphone is.

21 THE WITNESS: I'll try that. Brent Zacharias. Is
22 that better?

23 BY MR. MENCHEL:

24 Q. Mr. Zacharias, where do you work?

25 A. I work at a company called Nuseed.

—Zacharias, B. - Direct—

1 Q. What is Nuseed?

2 A. Nuseed is, by its name, a seed company. We produce
3 seeds. We develop crops from those seeds. As the name
4 implies, Nuseed is a new kind of seed company that focuses on
5 developing nutritional profiles of the crops that come from
6 those seeds that we plant.

7 Q. What is your position at Nuseed?

8 A. My position is the group executive.

9 Q. Does that mean you're the head of the company?

10 A. Yes, it does.

11 Q. And as the head of the company, what are your
12 responsibilities at Nuseed?

13 A. My responsibilities are fairly broad. I am responsible
14 for the strategy of the company, for the resources, and what
15 things we choose to employ our people to do, and we've got
16 people in various parts of the world.

17 Q. And is there a name for the type of business that Nuseed
18 is in?

19 A. Yeah, we call it the agribusiness or the seed and
20 agribusiness.

21 Q. And does your company focus on any particular part of
22 that business?

23 A. Yeah, as I said, we develop the seeds. That's more of
24 plant breeding and technology. We develop those seeds, and
25 we have a business where we sell seeds to farmers in

—Zacharias, B. - Direct—

1 different parts of the world, but we also have a business
2 where we facilitate the planting and growing of those crops
3 so that we can bring more nutritious foods and feeds to the
4 world.

5 Q. And what made you interested in that agribusiness?

6 A. A farm boy. I grew up in the prairies in Canada, in
7 Saskatchewan, on a small farm. The farm wasn't quite big
8 enough to make a living with, so I decided to go into
9 business and pursue a degree in agriculture.

10 Q. Where did you get your degree in agriculture?

11 A. It was in the University of Saskatchewan.

12 Q. Is that in Canada?

13 A. Yes, it is.

14 Q. And what, particularly, did you focus on in your
15 agriculture degree?

16 A. I have a degree -- it's called a Bachelor of Science in
17 agriculture, with a major in economics.

18 Q. Did the courses also include chemistry and biology?

19 A. Yes, they did.

20 Q. Now, when did you begin your work at Nuseed?

21 A. I started with Nuseed in 2008.

22 Q. We're going to talk more about them in a minute, but I
23 want to sort of take you through after you graduated college.
24 When was that?

25 A. I graduated college in 1993.

—Zacharias, B. - Direct—

1 Q. And did you get a job upon graduation?

2 A. Yes. I was lucky enough to get one, yeah. I started in
3 1993 with a company called Dow AgroSciences.

4 Q. Dow, is that commonly known as Dow Chemical Company?

5 A. That's correct. That's the agriculture side of the Dow
6 Chemical Company.

7 Q. And what, specifically, was your business at Dow Agro?

8 What were you doing there?

9 A. I changed jobs a few times through that period. I
10 started as a sales representative with them for about five
11 years, and then, after that, I moved into their head office
12 and took several roles.

13 Q. But specifically, in terms of the business of Dow Agro,
14 were you focused on anything in particular?

15 A. At that time, originally, the business was in what we
16 call crop protection, which is really protecting the crops
17 from different types of diseases or weeds or bugs.

18 Q. And later on, did the focus of your work at Dow change?

19 A. Yes, it did. As I said, I moved into their head office,
20 and at that time, I took a role in human resources. My role
21 at that time was really to help recruit all of the scientists
22 and the different people responsible for building a canola
23 seed business within Dow AgroSciences at the time.

24 Q. So you were working in the canola seed business in Dow?

25 A. Yes, that was the start of my career in the seed

—Zacharias, B. - Direct—

1 business. After human resources, I moved into a role called
2 the Commercial Development Leader, and that was really to
3 help develop the business within canola for Dow AgroSciences.
4 And then, after that, my final role was in the business of --
5 my role was a marketing manager, and I was a marketing
6 manager of oils, so those responsibilities included
7 developing the markets, particularly in the United States and
8 in Asia, for novel oils that the company was developing.

9 Q. And you mentioned canola oil. Is that what we're all
10 familiar with that we can buy in the grocery store in shelves
11 of vegetable oils?

12 A. That's correct. That's the primary use of canola oil.

13 Q. And commonly what is canola oil used for today?

14 A. What we describe as the commodity canola oil is typically
15 used for cooking. You can use it in salad dressings, baking.
16 It's also a big ingredient within the food chain for a lot of
17 restaurants and food manufacturers.

18 Q. Now, you mentioned something a moment ago called "novel
19 oils." Can you explain to the members of the jury and the
20 Court what a novel oil is?

21 A. Sure. It's a term we use, but essentially, if you are
22 doing anything to change the oil itself from what you would
23 typically see as a commodity canola oil, if you're trying to
24 improve different aspects of it for nutrition or for utility,
25 then that would be what we would consider to be a novel or

—Zacharias, B. - Direct—

1 new type of oil.

2 Q. Can you just give us an example of how a seed oil -- we
3 get the oil from the seeds. Is that right?

4 A. That's correct.

5 Q. Okay. And how do we get the oil from the seeds?

6 A. So canola seed is very small. It gets planted; you grow
7 the crop. It produces more of those seeds, or the grain as
8 we call it, and then you take that grain and you crush it,
9 and when you crush it, you get two products, really. One is
10 oil, and then the other is really just the remainder of the
11 seed, which we call the meal, and that usually goes to animal
12 feed.

13 Q. So can you give us an example, while you were at Dow
14 working on these oil seeds, what would be an example of a
15 novel oil? What was it that Dow, for example, may have tried
16 to change to make the oil less than a commodity and something
17 more special?

18 A. An example that's well known in the industry now but
19 would have been a high oleic oil, to change the structure of
20 the oil so it can be used at higher temperatures and removes
21 issues in the food supply chain, like saturated fats or trans
22 fatty acids.

23 Q. About how many years, all told, did you work at Dow Agro?

24 A. I was there for about 13 years.

25 Q. And did there come a time when you left?

—Zacharias, B. - Direct—

1 A. Yes. I left the company in 2006, and I joined, at that
2 time, the Nufarm Company, which was the parent company of
3 Nuseed.

4 Q. Now, I'm mindful of the Court's admonition of the size of
5 companies, but I just want to ask you what was the reason why
6 you left Dow to join Nufarm, generally speaking? You don't
7 have to get into numbers.

8 A. The biggest reason was growing tired of that bigger
9 company environment and some of the bureaucracy that went
10 with that, so I decided to join a smaller company, more
11 entrepreneurial.

12 Q. And that was Nufarm?

13 A. Correct.

14 Q. And where were you working at Nufarm?

15 A. When I started with them, I started in Canada, and I was
16 working as their commercial leader for Canada.

17 Q. Now, you mentioned earlier that you currently work at
18 Nuseed.

19 A. Correct.

20 Q. What is the relationship, please, between Nuseed and
21 Nufarm?

22 A. Yes, Nufarm is our parent company. They're the ones that
23 are involved, primarily, in the crop protection business, as
24 I described, and then they developed this new company called
25 Nuseed as a start-up. So we're wholly owned by Nufarm.

—Zacharias, B. - Direct—

1 Q. Okay. But when you started there in, I think it was,
2 2006, you said?

3 A. That's correct.

4 Q. You started at Nufarm?

5 A. That's right.

6 Q. And what -- withdrawn.

7 What is the business of Nufarm? You talked about
8 Nuseed, but how is Nufarm different?

9 A. Yes. Nufarm is primarily a company involved in
10 protecting crops. We call it crop protection, which is that
11 business of helping to control weeds or different types of
12 bugs or pests or fungus.

13 Q. And what position did you have when you joined Nufarm in
14 2006?

15 A. I started as their commercial leader in Canada, so I was
16 responsible for sales, marketing, and their Regulatory
17 Affairs Department.

18 Q. Did you move anywhere else within Nufarm while you were
19 there?

20 A. I was there for about 18 months, and then the company had
21 asked me to move to Australia, so I took my wife and young
22 family, and we moved to Australia to take on the role of
23 general manager for the Nuseed Company.

24 Q. And you mentioned that Nuseed is what you called the
25 start-up?

—Zacharias, B. - Direct—

1 A. Yes, it was a very new start-up division within the
2 parent company at the time.

3 Q. And remind us again what the focus of Nuseed was, as
4 compared to Nufarm.

5 A. So it was a completely dedicated unit for the development
6 of seeds and, as I said, with a specific focus on enhancing
7 the nutritional quality of the crops that grow from those
8 seeds.

9 Q. When was Nuseed actually incorporated; do you know?

10 A. It was incorporated, I believe, in 2006, and I arrived in
11 2008.

12 Q. Okay. And when you started there, what was your job?

13 A. I was the general manager of the Nuseed business.

14 Q. And what were your responsibilities as general manager of
15 Nuseed?

16 A. Originally, it was to manage the business that was there.
17 It was quite small, but it was really more about developing
18 the strategy of Nuseed, in terms of developing the company,
19 really more of an international strategy and where we wanted
20 to invest our resources and what types of technologies we
21 wanted to focus on.

22 Q. And did you have some ideas about the strategy and the
23 technologies that you wanted to focus on while you were at
24 Nuseed?

25 A. Yeah. I'd say we were very focused on the smaller crops

—Zacharias, B. - Direct—

1 in terms of canola, sunflower, and sorghum. We weren't
2 focused on the big crops, like some other companies, like
3 corn and soy. But within those crops, we were most focused
4 on things that we felt could make a dig difference in terms
5 of human nutrition or solving different problems that you see
6 in the world.

7 So, as I mentioned, we called it Nuseed, which is a
8 new kind of seed company that was really focused on how could
9 we solve other bigger problems in the food supply or feed
10 industry by influencing what we do in plants.

11 Q. And was there specific focus -- I want to just direct you
12 to canola. Was that the main focus of the company?

13 A. Yes, it was.

14 Q. And was there a specific idea that you helped or were
15 involved in that you wanted to bring to Nuseed?

16 A. I'd say that the specific focus was to try to get some
17 form of breakthrough in terms of what is the value or impact
18 we could have with the canola crop, beyond just growing more
19 commodity grain. And the biggest idea in the whole industry
20 at the time was what we've probably already heard about was
21 omega-3. That was considered to be, you know, what the
22 industry probably talked about as the Holy Grail of
23 invention, and the amount of -- we could unlock incredible
24 value if we could achieve that within canola.

25 Q. Now, I know the jury has heard this in opening

—Zacharias, B. - Direct—

1 statements, but it's your testimony that is the evidence, and
2 it might be helpful for them to hear it again, anyway.

3 Can you explain what you mean about omega-3s and
4 canola?

5 A. Sure.

6 Q. Let me withdraw that question.

7 The canola plants naturally make what we call the
8 long-chain omega-3 fatty acids.

9 A. No, they do not. Canola -- it gets a bit confusing.
10 Some plants do make short-chain omega-3s. Like flax, canola,
11 and soybeans do make some types of omega-3s that are called
12 short-chain or sometimes described as ALA, but they do not
13 make the long-chain.

14 Q. Now, the jury heard in opening statements about some of
15 these oils called EPA and DHA. Are you familiar with those?

16 A. Yes, I am. I've spent a big chunk of my career working
17 on those now.

18 Q. About how many years in your career, both at Dow, Nufarm
19 and Nuseed, have you been working on canola oil and this
20 omega-3 concept within canola oil?

21 A. I've probably been involved with it now for over half my
22 career, so probably 15 years have been involved in the
23 discussions and looking at this as an area of business in --

24 THE COURT: Well, what's the advantage of long-chain
25 over short-chain?

—Zacharias, B. - Direct—

1 MR. MENCHEL: I've got a whole slide on that.

2 THE COURT: Okay.

3 MR. MENCHEL: But I want to first get the lingo
4 down.

5 BY MR. MENCHEL:

6 Q. The chemists use the term "long-chain polyunsaturated
7 fatty acids" for omega-3 oils.

8 A. That's right. I know it's a mouthful, but long-chain
9 polyunsaturated fatty acids that are omega-3s, those are the
10 ones we were talking about that are the most valuable ones.

11 Q. Okay. And is the shorthand of that the acronym LC PUFA,
12 L-C P-U-F-A?

13 A. Yeah, LC PUFA, we can call that for today; although, to
14 be accurate, it's LC omega-3 PUFA.

15 THE COURT: What did you just say? LC what, now?

16 THE WITNESS: Sorry, Your Honor. It's LC omega-3 or
17 O-3 PUFA.

18 THE COURT: LC omega-3. I mean, if you were talking
19 to somebody who wasn't a chemist or a scientist, what would
20 you describe this item as?

21 THE WITNESS: I would just call them long-chain
22 omega-3s or --

23 THE COURT: LC, or long-chain?

24 THE WITNESS: LC O-3s, yeah.

25 MR. MENCHEL: Thank you.

—Zacharias, B. - Direct—

1 BY MR. MENCHEL:

2 Q. I'm going to make it even simpler and just refer to them
3 as omega-3s for the purpose of this, okay?

4 A. Okay.

5 Q. His Honor asked a very good question about what the
6 advantages are of these oils. Have we put together a slide
7 on that?

8 A. Yes, I believe we have.

9 Q. Can you put that up, please.

10 Now, if you would, Mr. Zacharias, can you sort of --
11 I just want to focus on this chart that's been blown out on
12 the right which says, "Types of omega-3 fatty acids."

13 Do you see that?

14 A. Yes, I do.

15 Q. Are you familiar with those types?

16 A. Yes, I am.

17 Q. And can you sort of walk us through, when we go from ALA
18 all the way down to DHA, what is happening?

19 A. Sure. As I think I mentioned, the plant itself, or a lot
20 of types of plants that create vegetable oils, can create the
21 ALA. That's at the top of the chart. That's what we would
22 call short chain.

23 And as you go down the list, or down the chain, as
24 we like to call it, all the way down to DHA, the structure of
25 those fatty acids change. So if you think of oil in a jug,

—Zacharias, B. - Direct—

1 oil is made up of all kinds of fatty acids. But in this
2 case, in omega-3s, the short chain we're talking about is the
3 ALA, and as you continue to go down, those fatty acids just
4 get longer and more complex.

5 And what's important about that -- and I think Your
6 Honor's question was what is the difference -- the further
7 you go down into long-chain, there's very distinct and
8 different types of health benefits.

9 So, like we've talked about, as you go further down,
10 they're very different. So if you go all the way down to
11 DHA, for example, DHA is the biggest of those different types
12 of fatty acids, but they also have very, very distinct
13 benefits. DHA is actually in your membranes --

14 Q. Wait there for a second. Let's not get too far ahead.

15 So at what point in this chart do scientists refer
16 to these omega-3s as the long-chain ones? Where does that
17 start?

18 A. Typically -- and, again, I'm not a scientist, but I think
19 typically if they're 20 chains and longer, they're
20 long-chain. If they're 18 and shorter, they're short-chain.
21 So that would mean that the further you go down, particularly
22 the last three, are long-chain omega-3s. The one at the top
23 is absolutely short-chain, and there's probably been a debate
24 in the middle.

25 THE COURT: What do these numbers mean?

—Zacharias, B. - Direct—

1 MR. MENCHEL: I was going to ask that.

2 BY MR. MENCHEL:

3 Q. I didn't want to get too much into the chemistry, but
4 when you say 20, you're referring to the number of carbons
5 that are in each one of these fatty acids?

6 A. That's right.

7 Q. And the chemist will explain that; not you, right?

8 A. Right.

9 Q. All I want to know is for the purposes of your discussion
10 right now, when we talk about long-chain, we're talking EPA,
11 DPA, and DHA, correct?

12 A. That's correct.

13 Q. You were about to talk about the benefits. And, again, I
14 think the jurors have heard this, but it's your testimony
15 that's the record so --

16 MR. MENCHEL: Can we put up the next exhibit,
17 please?

18 THE CLERK: Exhibit or slide?

19 MR. MENCHEL: I'm sorry, slide.

20 BY MR. MENCHEL:

21 Q. Can you explain what the health benefits are for these
22 omega-3s?

23 A. Sure. And, again, in general terms, EPA and DHA have the
24 most well-known health aspects to them. They're most
25 well-researched. I think now we're well over 30,000

—Zacharias, B. - Direct—

1 different studies that have validated this. That's probably
2 more research than a lot of the drugs that we have today.
3 And you can see on the right-hand side, there's a lot of
4 benefits in different parts of the body, you know, from --
5 particularly, if you start at the top of the body, the brain
6 especially, a big part of our brain, is actually DHA, and
7 it's -- as I was beginning to say before, it's part of the
8 structure of our membranes, so it's in our skin, it's in the
9 retinas of our eyes.

10 So EPA and DHA has been well-known as being the most
11 beneficial, and you can see on the left-hand side there's a
12 lot of evidence now that ties it to overcoming challenges
13 with cancer, Alzheimer's, infant brain development, heart
14 disease, diabetes, asthma. You know, for any of us that have
15 bought baby formula, for example, it's enriched with DHA to
16 help with the brain development of babies and infants.

17 Q. Now, before the technology that Nuseed, CSIRO, and GRDC
18 developed in this case, where did omega-3s like EPA and DHA
19 mainly come from?

20 A. They all almost exclusively came from fish, particularly
21 oily types of fish; so salmon, tuna, anchovies, those types
22 of fish.

23 Q. Herring?

24 A. Herring, yeah.

25 THE COURT: Well, wait a minute. Anchovies, salmon,

—Zacharias, B. - Direct—

1 tuna. What else?

2 THE WITNESS: Herring, mackerel.

3 THE COURT: There's a lot of them.

4 THE WITNESS: Yeah. I mean, they're in a number of
5 different fish, but those are the ones that are probably the
6 oiliest and have the most concentration of EPA and DHA in
7 them.

8 THE COURT: Okay. What was the fifth one?

9 THE WITNESS: Mackerel. Is that the last one I
10 said?

11 MR. MENCHEL: Maybe herring, Your Honor.

12 THE COURT: Herring, right. Okay.

13 MR. MENCHEL: May I proceed?

14 THE COURT: You may.

15 MR. MENCHEL: Okay.

16 BY MR. MENCHEL:

17 Q. Now, these fish that you just talked about, the salmon
18 and so on, do they make the omega-3 fatty acids that are in
19 their bodies?

20 A. No, they do not. They actually consume other things in
21 the ocean that concentrate these fatty acids into their
22 bodies.

23 Q. I believe we have a demonstrative on that. Could you
24 call that up, please?

25 Could you just sort of walk us through how the

—Zacharias, B. - Direct—

1 omega-3s start and where they ultimately end up by the time
2 that we get them on our plates?

3 A. Yes. So as the title says, the microalgae are the
4 original producers of long-chain omega-3s in nature, so they
5 are the ones at the bottom of the screen, and they're like
6 micro-sized plants that exist in the ocean.

7 Q. Microscopic?

8 A. That's right.

9 Q. Continue, please.

10 A. So they develop in the ocean. They're actually consumed
11 by certain types of fish or herbivore-type fish that just eat
12 those small plant-type elements in the ocean, and then bigger
13 fish eat the smaller fish, and so on. And then, basically,
14 those fatty acids get concentrated up, particularly into
15 those types of fish that we talked about.

16 Q. As we move up the food chain, the degree in amount of
17 these omega-3s also increase. Is that right?

18 A. That's correct.

19 Q. Okay. Now, what are the two ways or what are the ways
20 that human beings get these omega-3s into their bodies?

21 A. Two primary ways: You can either be the man in the boat
22 catching the fish and eating fish, particularly those four or
23 five that we mentioned, is one way to get these long-chain
24 omega-3s into your body.

25 The other primary way right now is that you can

—Zacharias, B. - Direct—

1 take -- you can harvest some of those smaller oily fish out
2 of the ocean, and then you process the oil out of them. Like
3 herring and anchovies, you process the oil out of them, and
4 you can put them into capsules. And you see the capsules in
5 the grocery stores or supermarkets that are EPA, DHA
6 capsules. That's the other primary way that we get them into
7 our diet.

8 Q. Fish oil capsules?

9 A. Correct.

10 Q. And where can we buy them?

11 A. Almost everywhere now; you know, Walmart, Costco, your
12 pharmacy. There's usually a half an aisle of those types of
13 tablets and supplements that you can buy in those types of
14 stores.

15 Q. I'm going to turn back to the fish oil capsules later.
16 For now, I just want to focus on the fish that we eat, okay?

17 A. Okay.

18 Q. Are there enough wild fish in the ocean to currently meet
19 the demand for fish that human beings want to consume?

20 A. No, there's not. The amount of fish that we consume now,
21 today, as a society, has been going up dramatically, and
22 there's simply not enough fish in the ocean to be able to
23 sustain the demand from humans for fish today.

24 Q. And, in fact, what is happening to the supply of wild
25 fish in the ocean? Is it going down, up, staying the same?

—Zacharias, B. - Direct—

1 What?

2 A. Yeah, I think, generally speaking, everyone's aware of
3 overfishing challenges and the amount of regulatory pressures
4 to try to sustain our natural resources in the oceans, so
5 it's very, very difficult right now to manage that balance,
6 and the fact that humans are consuming way more fish than
7 what the ocean can actually supply.

8 So in some cases, I know we've overfished and ruined
9 some of our fisheries, but I would say today the industry is
10 doing a good job of trying to maintain that sustainability.

11 Q. Do we have a demonstrative that speaks to that?

12 A. Yes, we do.

13 Q. Can you explain this?

14 A. Yes. So it's very basic fundamentals. The world supply
15 of fish in the ocean or what we would describe as wild-caught
16 fish, you know, the supply has continued to decrease while
17 the demand continues to increase, which is the challenge that
18 we have to overcome as an industry.

19 Q. And, generally speaking, what happens to the price of a
20 product when there's less supply and there's more demand?

21 A. Generally speaking, when that happens, you get price
22 spikes, or you get -- you know, things become unaffordable to
23 everyday consumers. So those are the challenges that you're
24 dealing with.

25 Q. So how have the humans dealt with the fact that there's a

—Zacharias, B. - Direct—

1 greater demand for wild fish than there actually is wild fish
2 in the ocean?

3 A. So in the last 15, 20 years, there's been a huge shift.
4 You know, industry has responded, and we've developed a whole
5 new business called aquaculture or aquafarming, which is the
6 business of farming fish to be able to meet the demands that
7 are being placed on the industry.

8 Q. So where does somebody farm fish?

9 A. Well, it's actually happening in lots of places in the
10 world. It really depends on what types of fish you're
11 farming. If you talk about salmon farming, which has become
12 a very big business, salmon farming is done a lot in
13 countries like Norway, countries like Chile, little bit in
14 Canada, North America, a few other areas.

15 If you think about shrimp, shrimp is also a huge
16 aquaculture or fish farming business, and a lot of that
17 happens in Asia or Southeast Asia.

18 Q. I apologize. My question is simpler.

19 Do we farm them in the water?

20 A. Yes, we do.

21 Q. And in the ocean or on a land mass that has water?

22 A. It depends on the type of fish. If it's salmon, as an
23 example, we would actually hatch the eggs on land in a
24 facility and put them into fresh water, and then once they
25 get to a certain size, we'll actually move them and put them

Zacharias, B. - Direct

1 into their natural habitat out into the ocean. And they'll
2 be into -- you know, these fish farms actually are in the
3 ocean just off the coastline of these different countries.

4 Q. I'm going to show a demonstrative in a moment, but can
5 you give the jury a sense of how much farmed fish nowadays is
6 being harvested for human beings?

7 A. It's quite remarkable. I don't think many people know
8 this, and it's a great dinner conversation, but today, in
9 many different types of fish, we farm way more fish than we
10 actually catch out of the ocean. In the case of salmon, as I
11 referenced, I believe we're now at a point where we have
12 about 75 percent of all the salmon we consume in the world is
13 actually farmed. It's not caught in the wild ocean. So it
14 just tells you how quickly and dramatically this industry has
15 grown.

16 I don't think a lot of people realize just how
17 significant that is. And across all of aquaculture, we're
18 very, very quickly moving to a lot of different fish that are
19 actually grown in these types of farming systems just to be
20 able to respond to the demand.

21 THE COURT: Is all salmon fish farming concluded in
22 what you call the natural habitat, which is the ocean, or are
23 some of these farms on man-made lakes, or water, or what?

24 THE WITNESS: In the case of salmon, Your Honor,
25 almost all of it is done in the ocean now, but there is some

—Zacharias, B. - Direct—

1 new technology that's just being talked about where we might
2 be able to do it on land and actually bring the ocean water
3 to the fish. So there's -- but up until now, everything I've
4 talked about is predominantly done in the ocean.

5 THE COURT: Okay.

6 BY MR. MENCHEL:

7 Q. And tell us or just give us some sense of the scope of
8 this. How do you compare the amount of fish that's harvested
9 on these fish farms compared to, say, harvested beef that a
10 lot of us are familiar with?

11 A. Yeah, we probably don't think of it this way in North
12 America, but we're now at a stage in the world where there's
13 more fish being produced in a farming system than there is
14 beef. It's that big. It's a really big industry.

15 Q. And I want to just put up a demonstrative of these fish
16 farms. Can you show us what we're seeing -- tell us what
17 we're seeing on the left side of the screen with all these
18 circles?

19 A. Sure. So this is a fish farm, and you can see the big
20 circles. So, as I mentioned, when you bring the small salmon
21 from land, you put them into smaller pens until they get to a
22 certain size. The circles are basically like a net, and so
23 they sit just off the coastline, and you put the fish in
24 there, and then you grow them all the way to market size, and
25 then once you grow them to be market size, then you would

—Zacharias, B. - Direct—

1 process the fish the same way you would do if you had just
2 caught it out in the ocean.

3 Q. So that the jury understands, there's netting below that
4 so the fish basically just can't go anywhere. Is that right?

5 A. That's right. You're farming them and feeding them and
6 trying to keep them in one place so that you can keep them
7 healthy and then harvest them.

8 Q. How big are those circles that we're looking at,
9 generally speaking?

10 A. There's a few different sizes there, but some of them
11 are, you know, almost as big as a football field.

12 THE COURT: Almost what?

13 THE WITNESS: Almost as big as a football field.

14 Some of them can get that big. They're maybe 100 yards
15 across.

16 BY MR. MENCHEL:

17 Q. Now, on the right-hand side, what are we seeing here?

18 A. So that's just a picture of a school of fish within one
19 of the farming systems.

20 Q. And that's how a lot of fish swim; they swim in schools
21 like that?

22 A. Yes.

23 Q. Now, how are these fish fed?

24 A. So to support the aquafarming industries, there's another
25 industry that's developed called the aquafeed industry. So

—Zacharias, B. - Direct—

1 there's actually a lot of science that goes into this in
2 terms of developing the nutrition and the diets that have to
3 go into feeding these fish. So we actually will create food
4 pellets, so they're small pellets that will include all the
5 nutrition that's required for those fish, and then those
6 pellets will actually be fed over the top of the water into
7 those different systems.

8 Q. Like fish food?

9 A. Yes.

10 Q. And when you sprinkle it in, is what happens in like a
11 fish tank? Do the fish come up and --

12 A. Yeah, they all come and feed; that's right.

13 Q. And this fish farming industry, can you just give the
14 jurors a sense of the size of this industry? How big is it
15 in terms of from a dollar proposition?

16 A. The aquaculture business and the fish feeding business is
17 a very, very big industry now. You're talking tens of
18 billions of dollars that goes into this type of industry
19 today.

20 THE COURT: That's not just salmon, but all fish?

21 THE WITNESS: That's right. That's right.

22 BY MR. MENCHEL:

23 Q. Now, I think we were talking about, before, wild fish,
24 and when wild fish are caught in the ocean naturally, you
25 know, not ones that are raised in farms, they have omega-3

—Zacharias, B. - Direct—

1 oils in their body because the omega-3 oil originally came
2 from this microalgae, this microscopic algae that we talked
3 about earlier.

4 A. That's right.

5 Q. If we farm-raise fish, will they actually have omega-3
6 oil in their bodies?

7 A. No, they won't, or at very low levels.

8 Q. So how do we get these essential omega-3 fatty acids that
9 are good for us into the farm-raised fish that would
10 naturally come from wild-caught fish?

11 A. The only way we can do that is we actually have to take
12 omega-3 fatty acids and add them to those pellets. So the
13 food that we actually feed to these fish have to have those
14 long-chain omega-3s, EPA and DHA.

15 Q. And where do those fatty acids come from?

16 A. Yeah, this is the ironic part; is that we actually have
17 to go catch those small fish out of the ocean, the anchovies
18 and the herrings, take the oil, process the oil out of those,
19 up until today, and then that fish oil is added to those
20 pellets for food to be able to grow the salmon.

21 Q. In other words, the farm fish have to be fed fish oil
22 from wild fish in order to have omega-3 oil?

23 A. Correct.

24 Q. And, so, if the farm-raised fish aren't fed fish oil and
25 they don't have these omega-3s, why is that an issue? Why

—Zacharias, B. - Direct—

1 does it matter?

2 A. It's really two big issues. One is, obviously, if they
3 don't have it, the product that we buy, the salmon filet,
4 won't have omega-3s in it like we would hope or expect it to
5 have, so it changes what it's useful for in terms of us as
6 humans.

7 But the second aspect is if you don't add it, it
8 actually becomes a production and health issue for the salmon
9 in these farms themselves. It's actually -- just like
10 humans, it's an essential fatty acid for their own
11 development and health. So when we increase the amount of
12 omega-3s we put in their diet, the fish are healthier, they
13 grow faster, they fight off disease, and they can actually
14 have different types of quality in the fish that we buy.

15 Q. Now, you testified earlier that there's a pretty big gap
16 between the supply of wild fish and the human demand for it.
17 Is there also enough wild fish to make fish oil to feed the
18 farm fish?

19 A. No, there's not.

20 Q. And, as a result of that, you talked about this aquafeed
21 industry, right?

22 A. That's right.

23 Q. Are they the ones that make these pellets?

24 A. Yes.

25 Q. Okay. So just so the jury understands, would they put

—Zacharias, B. - Direct—

1 the omega-3 fish oil in the pellets that they feed the fish?

2 A. Yes, they do.

3 Q. And now you're saying that there's a gap between the
4 available little fish that can be used to make the oil to
5 feed the farmed fish?

6 A. That's right.

7 Q. So what's been happening in the aquafeed and aquaculture
8 industry as a result of this gap of enough fish oil to feed
9 the farmed fish?

10 A. So over the last, probably, ten years, what the aquafeed
11 industry has had to do is they continue to reduce the amount
12 of omega-3 oils that they're putting in the feed, one,
13 because it's just simply not available, and because it's
14 beginning to be more and more expensive. So the amount of
15 omega-3s that are actually being used in farm-raising fish is
16 going down and down.

17 Q. How much has it gone down?

18 A. Generally speaking, from 15 years ago, it's probably gone
19 down 75 percent.

20 Q. Now, is there something known as -- I'm sorry. What was
21 the number that you said?

22 A. 75 percent, in terms of what it used to be to what --
23 it's declined by 75 percent to what it is now.

24 Q. The fish is less beneficial to us, as a result?

25 A. Yeah. From a nutritional perspective, yes.

—Zacharias, B. - Direct—

1 Q. Is there something called market volatility in the fish
2 and fish oil business?

3 A. Yes, there is.

4 Q. Can you explain what that is for the members of the jury,
5 please?

6 A. Yeah. So one of the challenges in this industry is, of
7 course, there's all these demands on these fish, particularly
8 the smaller ones that help feed this industry. And you're
9 dealing with fishing. So sometimes they're there, and
10 sometimes they're not. Sometimes different types of weather
11 patterns, especially if the ocean warms, they just don't have
12 the biomass there. So what will happen is --

13 Q. What do you mean by "biomass"?

14 A. Oh, sorry. The physical amount of fish that are in the
15 ocean, these types of fish you're going after.

16 So the regulatory agencies will monitor this very,
17 very closely, and they put limits or quotas in terms of how
18 much can actually be purchased -- or get caught. What
19 happens with that, if you get big, big swings --

20 Q. Swings in what?

21 A. You get swings in the supply that's available, and,
22 therefore, you get huge swings and spikes in the price of
23 fish oil.

24 Q. So I just want to make sure I understand. There's
25 weather issues and just general fishing issues that affect

—Zacharias, B. - Direct—

1 volatility?

2 A. Yeah.

3 Q. You also mentioned something about regulations or
4 regulatory processes. Can you explain that?

5 A. Right. So, as I mentioned earlier, the fishing industry
6 is trying to steward itself as best as it can, but, also,
7 governments are putting a lot more regulations on the
8 fisheries themselves to make sure we don't deplete our
9 oceans. So they'll put regulations as to how much can be
10 caught and how much supply is available.

11 So the small fish we're talking about have had a cap
12 supply for a lot of years. They can't go get more, and
13 sometimes even when they get a quota, they can't even go find
14 all of the ones that they have a quota for.

15 Q. So we have a lack of sufficient supply of the big fish
16 that we eat. Is that right?

17 A. Correct.

18 Q. And we have a lack of supply of the little fish that make
19 the fish oil for the farmed fish.

20 A. Correct.

21 Q. What's the solution?

22 A. So the solution that we look for -- and this is referred
23 to, you know, as the Holy Grail sort of invention that
24 everybody has been chasing, is to get to a different source,
25 a reliable, sustainable, renewable source of these long-chain

—Zacharias, B. - Direct—

1 omega-3s, because up until now, really, the only place has
2 been out of the ocean. So the solution that we've been very
3 focused on is omega-3 canola.

4 Q. We have a chart that sort of summarizes what we've been
5 talking about, a demonstrative, if you could put that up.

6 A. Just to summarize, then, the first problem: Not enough
7 fish for human consumption. What's the solution for that?
8 Aquaculture or aquafarming. And we've responded really,
9 really well to that, but that's created a new problem; that
10 there's not enough omega-3 ingredients. There's not enough
11 of these long-chain omega-3 fish oils to actually be able to
12 feed aquaculture, so therein became the new solution and what
13 a lot of folks are very eager to find, especially this whole
14 industry, was omega-3 canola.

15 And probably a better way to think about it is
16 there's a massive roadblock in terms of being able to supply
17 enough fish to the whole world if you can't overcome this,
18 and that's really the value and importance of this type of
19 invention.

20 Q. And, in the simplest way that you can, because this is
21 going to get real complicated for them later, and we would
22 rather keep it simple now, what is it that the technology
23 that you-all invented does for canola plants, in simple
24 terms?

25 A. In really simple terms, we've taught canola plants how to

—Zacharias, B. - Direct—

1 create these long-chain omega-3s within the canola plant.

2 Q. And, by the way, if we're able to actually farm plants on
3 the ground that can make these essential omega oils, how is
4 that helpful?

5 A. Probably the biggest thing is that we can plant as much
6 as we want. We can overcome all the supply issues, so you
7 overcome the issues both for the aquaculture and farming
8 industry for the fish that we all want to consume but also,
9 you know, the world population. You know, there's an
10 estimate that 80 percent of the people in the world are
11 actually deficient in these types of fatty acids, so when we
12 look at it, there's an opportunity not only to solve these
13 problems, but when we can plant as many seeds as we want to
14 and grow as many acres of this type of crop as we want to,
15 then we can also overcome some of these health issues and
16 deficiencies in humans, as well.

17 Q. What will that do to the volatility spikes you were
18 talking about in terms of the omega-3 oil that exists?

19 A. Essentially, if you could take that volatility away, you
20 would be able to grow as much as you needed in a particular
21 year to meet the market demand and enable some of these other
22 new uses so you could take some of these big volatility
23 spikes out of the market.

24 Q. Hopefully, what will that do to the price of fish that we
25 want to buy?

—Zacharias, B. - Direct—

1 A. Yeah, the way this industry works is it's a pass-through
2 system. When they have high costs, they pass them through to
3 us, the people that like to eat them, so this type of
4 technology can actually stabilize that and take the spikes
5 away. I think the bigger concern for this whole industry is
6 that, without it, you could have hyperinflation of the costs
7 of the finite amount of resources that are there. So I think
8 the way the whole industry looks at it is when you have a
9 scaleable solution like this of something you can actually
10 plant as much as you want, you can reduce that chance of
11 having super-expensive goods coming to consumers.

12 Q. Can we go back to the oil chart for a second, please?

13 So you testified a moment ago that the technology,
14 in its simplest terms, is to teach a plant to make these
15 long-chain omega-3 fatty acids.

16 A. That's correct.

17 Q. Normally, what exists in a canola plant would be what
18 type of oils that we're seeing on this demonstrative?

19 A. As I said earlier, the only one that's available in
20 plants today is the ALA, at the top. That's naturally
21 available in canola today, and some other plants, but that's
22 the only fatty acid that's naturally available in canola
23 today.

24 Q. And what was Nuseed and CSIRO and the folks at GRDC
25 attempting to do? How far down this chain did you-all want

Zacharias, B. - Direct

1 to teach a canola plant to make oil?

2 A. Yeah, it was a different strategy that we embarked on
3 within the partnership between the three companies, and the
4 way I like to describe it as to go all the way to DHA.

5 And the reason I say that is the strategy was if you
6 can teach the plant to go all the way to the most
7 sophisticated or longest chain one, the most sophisticated of
8 those different omega-3s, not only, then, can you have a
9 supply of that, but it also allows us to custom design and
10 make any one of these.

11 So once you have a blueprint for that, then we can
12 express any one of them. And why that's important is we've
13 talked a lot about EPA and DHA, and that's just because
14 that's where most of the health research has been because
15 that's what's available. But when you look at some of these
16 other fatty acids that are lesser known, they also have some
17 critical health benefit that could help us cure other types
18 of diseases or challenges in the human body.

19 So our strategy was to teach it to go all the way
20 down to DHA so that then, as part of our business, that we
21 could also look at designing different fatty acids and
22 different combinations with that blueprint as subsequent
23 businesses.

24 Q. Now, I asked you to try to describe this as simply as
25 possible, this technology that you-all invented, and you

Zacharias, B. - Direct

1 called it teaching a plant to make these fatty acids, right?

2 A. Correct.

3 Q. It sounds easy. Is it?

4 A. No. To try to put this in perspective, for those of us
5 that have spent our careers in this, if you make a single
6 step change, you know, one step, it's considered or has been
7 considered probably the most sophisticated science that we've
8 had in agriculture so far.

9 Q. Let me stop you there. When you say a step, are you
10 referring to like one fatty acid to the next?

11 A. Correct.

12 Q. So, in this example, from ALA to SDA?

13 A. Correct.

14 Q. Please continue.

15 A. But in this case, to go all the way to DHA, you're
16 talking about six or seven steps, so it's -- it's very
17 sophisticated. I believe that this is the most advanced
18 thing we've ever done in agriculture or in aquaculture. It's
19 really, really state-of-the-art in terms of what's been done.

20 Q. How would you describe this technological breakthrough
21 that you-all invented?

22 A. I'd use words like "breakthrough," or I think it's
23 game-changing. Being involved in agriculture, we typically
24 are very focused on producing more food, but in this case, we
25 have the opportunity to change what we're doing to produce a

Zacharias, B. - Direct

1 completely different type of food that is highly, highly
2 nutritious, and, to me, that is game-changing. I think,
3 personally, that's the future of agriculture; is that when we
4 get really focused on solving big problems or solving
5 different human needs through using the natural resources we
6 have in agriculture, that, to me, is game-changing.

7 Q. And is there something known as the gold standard in this
8 technology; something that is the highest level of
9 achievement in going through these various steps?

10 A. Yeah, we described DHA as the gold standard, meaning,
11 again, if you can go all the way to that, that is the most
12 complicated and sophisticated. And, again, it's in our human
13 bodies. It's part of our structure. It's a big part of our
14 brain. So we've described it as the gold standard, and I
15 talked a little bit about it also being in baby food.

16 Q. And, just so I understand, if you have the technology to
17 go all the way down to DHA, does that make it easier, then,
18 to go back up the chain to DPA, EPA, et cetera?

19 A. Yeah. I would describe it as once you have that
20 blueprint and the ability to go all the way, then your
21 ability to custom design -- that is, you've essentially
22 taught the plant to go all the way down to DHA now -- that
23 essentially means that we can do anything in between. We'd
24 be able to, with that technology, be able to up-regulate any
25 one of those fatty acids, especially if we do further

—Zacharias, B. - Direct—

1 research with other institutes that tell us that there are
2 also significant health benefits to those.

3 Q. Now, I have to confess I had some of the same
4 misconceptions about this that I think His Honor might have
5 had when I first got involved in this.

6 Where does the -- and we're using genes here, right?

7 A. Correct.

8 Q. Okay. And where do the genes come from that help teach
9 the canola plant how to make these omega-3s?

10 A. They come from that microalgae. So the small microscopic
11 plants that we said are in the ocean, we've essentially
12 looked at that as a base of technology to be able to help
13 teach the canola plant how to create them.

14 Q. So we're taking genes from one plant; using those genes
15 to teach another plant how to make those oils?

16 A. That's correct.

17 THE COURT: What happens when we run out of
18 microalgae?

19 THE WITNESS: Well, it's interesting. We've
20 actually just been able to create collections of those
21 microalgae, and our partner, CSIRO, has actually spent
22 decades just getting collections of them so they can hold
23 them in beakers in their labs. So we don't have to actually
24 keep using the microalgae. We just have to use them for
25 research purposes so there's plenty of microalgae available

—Zacharias, B. - Direct—

1 in the ocean. We're not actually using more than just a
2 sample to create the technology.

3 BY MR. MENCHEL:

4 Q. And His Honor raises a great point. Once you have the
5 plant the way you like it, do you need to go back to the
6 microalgae?

7 A. No. So, essentially, we create the technology in a
8 canola plant, and then that canola plant sort of becomes the
9 parent for the subsequent generations.

10 Q. Now, you testified that when you first came to Nuseed,
11 this was one of the projects that you were focused on, this
12 technology of teaching a canola plant to make these omega-3s.
13 Is that right?

14 A. Yeah, I'd say it was one of the business areas that I was
15 most passionate about trying to develop within the company.

16 Q. Was Nuseed able to do this alone, or did they need people
17 to partner up with?

18 A. No, we absolutely needed partners, and that's what
19 brought us to CSIRO and GRDC.

20 Q. And I think this was mentioned in the opening, but just
21 so we're clear, you referred to it as C-S-IRO, others CSIRO,
22 correct?

23 A. Correct.

24 Q. Let's focus first on CSIRO. What is CSIRO?

25 A. So CSIRO is the Commonwealth Scientific and Industrial

—Zacharias, B. - Direct—

1 Research Organisation of Australia, a government company.

2 Q. And is it a national science agency in the same way that
3 here in the United States we have science agencies like NASA,
4 things like that?

5 A. That's correct.

6 Q. Why did you decide to team up with CSIRO?

7 A. As I referred to, there's a couple reasons, but as I
8 referred to earlier, you know, in our view, CSIRO was the
9 only company that had the complete blueprint to do what I
10 just described; to be able to get all the way to DHA, and not
11 just all the way, but at commercially relevant levels. You
12 have to be able to do it in a way that gets close to a
13 fish-oil type of standard.

14 So that's one reason, but the other reason was
15 because of the patent position that they had --

16 Q. Stick on the first reason. I want to talk about that.

17 A. Sure.

18 Q. So, in other words, you were partnering up with CSIRO
19 because they had the scientists that were working in this
20 area and this technology?

21 A. That's correct.

22 Q. And I think you testified to this. Was this something
23 that was going on through the agribusiness industry, people
24 trying to -- that is, scientists trying to make these canola
25 plants or other plants to make these oils?

—Zacharias, B. - Direct—

1 A. Yeah, absolutely. Through those years, I'd say every
2 major agricultural company was focused on this, as is there a
3 way to get there. So there was a lot of other companies,
4 some of the biggest companies in the agribusiness, trying to
5 pursue this.

6 Q. There's been various statements made in the various
7 opening statements. To your knowledge, was CSIRO the only
8 one who could go all the way from ALA all the way down to
9 DHA, as depicted in this chart?

10 A. Yes, that was my assessment; they were the only ones.

11 Q. Now, you mentioned that there was a second reason why you
12 felt teaming up with CSIRO was a good idea. What was that?

13 A. Yeah, the second reason was the fact that they had
14 already been creating a patent estate or an intellectual
15 property estate around these inventions, and more so from a
16 perspective of creating that complete blueprint down to the
17 end. So that was really important. I think it's important
18 for any size of company. But if you're going to make an
19 investment for ten years before you can actually sell
20 something, you need that type of intellectual property
21 protection.

22 Q. Well, you mentioned an IP estate. That's a term I'm not
23 familiar with. Can you explain what you mean by that?

24 A. Yeah. Sorry. It's some of the jargon, but intellectual
25 property or, in other words, patents, sometimes we refer to

—Zacharias, B. - Direct—

1 it as an intellectual property estate that covers your
2 complete and total invention for that blueprint from
3 beginning down to the end.

4 Q. And when you partnered up with CSIRO, or C-S-IRO, how
5 long did you think it was going to take from the conception
6 of this technology to actually get these plants to make these
7 oils so that they could be harvested and sold?

8 A. Yeah. We had looked at that, and we felt that -- you
9 know, it's hard to predict those things with precision, but
10 seven to ten years was the concept that we felt when we were
11 looking at between our engagement with the project and to
12 when we'd ultimately be able to sell it.

13 Q. And from a business standpoint, why was it important for
14 Nuseed that CSIRO had this IP estate around this technology?
15 Why was that important to you when you teamed up with them?

16 A. Well, it's a long investment, and it's a huge investment,
17 particularly for a company of our size. As I mentioned, we
18 were a start-up. So -- and it's standard in a lot of
19 research-based organizations. If you think about you're
20 digging a hole for seven to ten years of investment before
21 you're actually able to sell something. So no one does that
22 in the research world without believing you have a patent
23 position to protect you by the time you actually come out and
24 are able to sell.

25 Q. How does the patent protect you? Simple terms.

—Zacharias, B. - Direct—

1 A. It essentially protects you from competition; that by the
2 time you get to market, you have the ability to sell that
3 invention for a period of time.

4 Q. Now, you also mentioned that there was a second -- a
5 third partner in this project; is that right?

6 A. That's correct.

7 Q. Who was that?

8 A. GRDC.

9 Q. What does GRDC stand for?

10 A. They're the Grains Research and Development Corporation.

11 Q. And where are they?

12 A. They're based in Australia as well.

13 Q. What do they do?

14 A. GRDC is a government-sponsored organization that gets
15 funding both from the government and from farms to
16 essentially develop grains and to help further agriculture
17 within the country.

18 Q. Do they support a particular type of person or industry?

19 A. Yeah. They support the agriculture industry,
20 particularly trying to bring benefit to that industry and to
21 farms.

22 Q. Now, when you -- by the way, did you have a -- when I say
23 you, I mean Nuseed or even Nufarm. Did they have a prior
24 relationship with CSIRO prior to the partnering up for this
25 technology that we've been talking about?

—Zacharias, B. - Direct—

1 A. Yeah. There had been a longstanding relationship between
2 our parent company, Nufarm, and CSIRO on multiple projects.

3 Q. And to your knowledge, did GRDC already have a
4 preexisting relationship with CSIRO at the time you partnered
5 up with them?

6 A. Yes. They had been involved in funding some of this
7 initial research for a number of years before we got
8 involved.

9 Q. Now, you mentioned that this was technologically a very
10 difficult thing to achieve; is that right?

11 A. Correct.

12 Q. I'm taking it wasn't cheap either?

13 A. No. It's been very expensive.

14 Q. And for Nuseed itself, approximately how much money has
15 Nuseed invested into this technology?

16 A. We've invested today about \$85 million of direct expenses
17 in this project.

18 Q. And again, understanding the Court's admonition, I don't
19 want to get into numbers, but how significant an investment
20 would that be for your company for this start-up?

21 A. I would describe it as a bet-the-farm size of number,
22 that -- we were a start-up back then. We, today, sell
23 somewhere between \$100 million and \$200 million worth of
24 products per year. So it's massive. You typically would not
25 see a company of our size get involved in this significant of

—Zacharias, B. - Direct—

1 an investment.

2 Q. Were you the only ones of the partnership that invested
3 money into this technology?

4 A. No. There was investment from the other two partners, as
5 well; GRDC, CSIRO, and ourselves.

6 Q. Approximately, all told -- approximately -- how much
7 money has been invested into this technology from the three
8 of you together?

9 A. Between the three of us all together, it's roughly about
10 \$200 million.

11 Q. Now, you said earlier that this was a -- I think you
12 called it a bet-the-farm proposition.

13 A. Correct.

14 Q. What does that mean?

15 A. We're a start-up company. We're, of course, doing other
16 things and developing seeds for farm, but we've built a whole
17 company around this. We've made this a central part of our
18 strategy. So we've invested everything that we've got
19 substantially into this project.

20 Q. And why would you make such a huge investment into a
21 singular technology like this?

22 A. Again, one could say that you're putting all your eggs in
23 one basket, but it's the most exciting thing I've seen in my
24 whole career. It's solving a big problem. I think it will
25 have a huge impact. It's also, you know, potentially a very,

Zacharias, B. - Direct

1 very valuable business for shareholders. So it's very, very
2 compelling.

3 Q. Now, you mentioned that CSIRO's contribution to this
4 partnership was their technology and their IP, their
5 intellectual property.

6 A. Correct. And their resources.

7 Q. And what was GRDC's contribution?

8 A. They brought know-how in terms of thinking in terms of
9 the farm gate and then how farmers could support this type of
10 technology, but they also brought financial contribution.
11 They were an investor in the project right from the very
12 beginning in the earliest patents.

13 Q. What would Nuseed be able to do for CSIRO that CSIRO
14 couldn't do for itself?

15 A. I think the attraction to us is that, obviously, we are a
16 commercial company. We develop products. We do marketing
17 sales. We're able to build a whole regulatory department to
18 get these products approved. But we also brought a lot of
19 technology in terms of our plants, the canola plants
20 themselves. We have a big business of -- or reasonable size
21 business of selling canola seed. So we had plant breeding
22 and plant expertise, but really, if you want to simplify it,
23 really, our job was to take it from the lab to the field,
24 which would be a better way to think of it.

25 Q. From the lab to the field?

—Zacharias, B. - Direct—

1 A. Correct.

2 Q. And so the jury has some sense of scope as to what you
3 think this business is worth, this technology and the
4 creation of plants that can produce these long-chain omega-3
5 fatty acids, how big a business are we talking about?

6 A. We believe this is a billion-dollar-plus business. It is
7 really, really significant, but I don't think we really know
8 the full answer to that yet. As I said, there's a lot more
9 research to be done yet and a lot of different things that
10 can be done with this technology that we haven't even yet
11 started.

12 Q. How long have you been collaborating with CSIRO and GRDC
13 on this project?

14 A. We started discussions shortly after I moved to Australia
15 in 2008, and we signed our first agreements together in 2010;
16 so roughly ten years.

17 Q. Now, in order to get -- I think you testified a moment
18 ago, taking it from the lab to the field. In order to get
19 crops actually planted in soil in the U.S. and other places,
20 what do you have to do? I don't mean digging the holes. I
21 mean from a regulatory standpoint.

22 A. Yeah. So this is an exciting technology, but there's
23 also -- it's a really important step to go through the
24 regulatory approvals within the different countries that
25 you're doing this in. So once you've actually developed the

—Zacharias, B. - Direct—

1 technology, then you start a process to get regulatory
2 approval to be able to grow and consume the crop.

3 We call that -- it's an industry term, but it's
4 called deregulation, and all that really means is that you
5 remove the regulation off the crop such that you have
6 permission to plant it, grow it, harvest it, and then sell
7 the resulting components of that crop.

8 Q. I want to focus here on the U.S. Did you need to get
9 regulatory approval or deregulatory approval, as you call it,
10 in order to be able to plant your crops?

11 A. Yes.

12 Q. Who do you have to get that regulatory approval from?

13 A. To plant the crops, you have to get that regulatory
14 approval from the USDA, United States Department of
15 Agriculture.

16 Q. And did you apply for that approval?

17 A. Yes, we did.

18 Q. How long did that process take?

19 A. The process from starting those experiments and creating
20 all of the data that you need until the time that you
21 actually get it is about three to three-and-a-half years.

22 Q. And without going into any detail, can you just explain
23 the type of things you need to tell the USDA, the Department
24 of Agriculture, in order to get approval to plant crops?

25 A. Sure. Basically, what you're trying to do is provide all

—Zacharias, B. - Direct—

1 of the data necessary for them to do an assessment; whether
2 this technology is safe to the environment and whether it's
3 stable and the plants that you're actually growing and that
4 it would grow as you would expect it to and that there's
5 nothing that's going to come of this technology that you
6 wouldn't expect.

7 So you're doing a lot of field trials. You're
8 taking samples off those field trials. You're measuring all
9 the performance of it over multiple years, and then you take
10 all of that information, and you put it into a petition, and
11 it's a big document with a lot of other supporting data that
12 essentially allows them to review your file and work with you
13 on a technical basis before they grant you an approval.

14 MR. MENCHEL: With the Court's permission, I'd like
15 to show the witness what's been premarked as trial exhibit --

16 THE CLERK: Do you have the witness binder for the
17 Judge?

18 THE COURT: How much longer are you going to be with
19 this witness?

20 MR. MENCHEL: I think I'm going to take him to the
21 end, Your Honor.

22 THE COURT: What is "the end"?

23 MR. MENCHEL: I think I'm going to go to 5:00, I
24 think.

25 THE COURT: All right.

—Zacharias, B. - Direct—

1 BY MR. MENCHEL:

2 Q. I'm handing you what's been marked as JX-35. Do you
3 recognize it?

4 A. Yes, I do.

5 Q. What is it?

6 THE COURT: Marked what, now?

7 MR. MENCHEL: JX-35, Your Honor.

8 THE CLERK: Joint Exhibit 35.

9 THE COURT: All right.

10 BY MR. MENCHEL:

11 Q. Do you recognize that, sir?

12 A. Yes, I do.

13 Q. What is it?

14 A. It's our petition to get approval for this from the USDA.

15 Q. And you said that petition was granted?

16 A. Yes, it was.

17 MR. MENCHEL: I offer that.

18 MS. SHAW: No objection, Your Honor.

19 THE COURT: Now, how long is this exhibit? Is this
20 whole page -- I mean, is this all one exhibit?

21 MR. MENCHEL: It is, Your Honor. It's fairly thick.

22 THE COURT: Well, with fairly thick exhibits, it's
23 incumbent on the proponent of the exhibit to designate which
24 pages of the exhibit are pertinent. And don't tell me all of
25 them.

—Zacharias, B. - Direct—

1 MR. MENCHEL: Your Honor, we're not going to talk
2 about it. I just wanted to get it into evidence so the jury
3 could see basically that it's a lengthy document.

4 THE COURT: All you want is Page 1?

5 MR. MENCHEL: If that's what you want to do, that's
6 fine, Your Honor.

7 THE COURT: What I want to do is -- it's not
8 realistic to expect the jury to read all these boxes full of
9 papers that you guys have brought here. So when you
10 introduce an exhibit, I just want the pertinent part of the
11 exhibit introduced as the exhibit. You can keep the backup
12 portion wherever you want so that the Court and the jury will
13 know that you're just not cherry-picking some portion and
14 leaving out some other portion.

15 MR. MENCHEL: Understood, Your Honor.

16 THE COURT: But the only thing you need is the
17 approval page. Then we'll just admit the approval page and
18 the rest of it can be filed elsewhere.

19 MR. MENCHEL: Very well, Your Honor. That's fine.

20 THE COURT: Okay. So I'm going to remove everything
21 except the cover page, and it's up to you to preserve it.

22 What we're trying to do here, ladies and gentlemen,
23 is to make the quantity of exhibits manageable. Now, we've
24 got one page here that they want to show that this was
25 deregulated --

—Zacharias, B. - Direct—

1 MR. MENCHEL: Correct.

2 THE COURT: -- which is the word for approval.

3 Well, we can do that in one page. We don't need the rest of
4 it because obviously if all of our exhibits were this long,
5 how could you possibly review them when you deliberate? So
6 that's what I'm trying to accomplish here. But if you don't
7 trust that one page you look at and you want to see what
8 backs that up, then it will be available upon request.

9 So I'm going to give you the rest of this back. So
10 it's going to be -- Page 1 is going to be the exhibit.

11 MR. MENCHEL: Very well.

12 THE COURT: It's up to you to find someplace to put
13 the rest of it.

14 MR. MENCHEL: I've got some ideas.

15 THE COURT: Okay.

16 (Joint Exhibit 35 received in evidence.)

17 MR. MENCHEL: May I proceed, Your Honor?

18 THE COURT: You may.

19 BY MR. MENCHEL:

20 Q. Were you the first one in the world to get this
21 deregulation?

22 A. Yes, we were.

23 Q. And since getting the permission from the U.S. Government
24 to grow these canola crops, have you all set out to actually
25 grow them here in the United States?

Zacharias, B. - Direct

1 A. Yes, we have.

2 Q. Where?

3 A. We've grown crops in Montana, and we've also grown crops
4 in North Dakota.

5 THE COURT: Where?

6 THE WITNESS: North Dakota.

7 THE COURT: Montana and North Dakota. Okay.

8 BY MR. MENCHEL:

9 Q. Approximately -- have you had the opportunity to start
10 harvesting those crops?

11 A. Yes, we have.

12 Q. When did that happen approximately?

13 A. Still happening, but it's cold weather up there at the
14 moment, but, yeah, we've been harvesting our first commercial
15 crop here in the last 30, 60 days.

16 Q. Approximately how many acres of DHA canola have you
17 harvested to date?

18 A. We've planted about 35,000 acres of canola, and I'm not
19 exactly sure how much is left up there to be harvested just
20 yet.

21 Q. Okay. And to give the jury some perspective on the scope
22 of that, approximately -- the approximately 35,000 acres of
23 this omega-3 canola oil, how does that compare to the amount
24 of fish one would have to get in the ocean in terms of the
25 amount of oil that you would get from both?

—Zacharias, B. - Direct—

1 A. It depends a little bit on which fish you're comparing
2 to, but roughly speaking, 35,000 acres would produce the same
3 amount of oil as if you were to go out and harvest
4 350 million pounds of a small fish.

5 Q. And to give the jury also some sense of scope, the amount
6 of oil that you're going to be getting from these canola
7 plants that are being farmed here in the U.S., if I were to
8 use those oil cars that we see on railroads that sometimes
9 contain oil, how many of those cars would we need to fill up
10 that oil?

11 A. Yeah, so the oil off of that crop would fill
12 approximately 150 railcars of those -- those tanker railcars
13 that you see.

14 Q. Now --

15 THE COURT: You mean like those kind of tanker cars
16 that carry oil and stuff?

17 THE WITNESS: That's right. The black ones,
18 generally, they are.

19 THE COURT: And you say 150 --

20 THE WITNESS: Correct.

21 THE COURT: -- tanker cars? Okay.

22 BY MR. MENCHEL:

23 Q. And when you say -- these farmers, do they work for
24 Nuseed? How do you work with them?

25 A. We create contracts with those farmers. So we approach

—Zacharias, B. - Direct—

1 them, and they essentially contract-grow the crop for us. So
2 we give them the planting seed. They plant the crop
3 according to our contract, and then they deliver the crop
4 back to us.

5 Q. Okay. And just so the jury understands, once this canola
6 grain is harvested, where does it go from the farm?

7 A. So we would store the grain on the farm until we decide
8 that we want to cull it in to a processing facility, and then
9 we'd bring it into a crushing processing facility and -- I
10 think as I described earlier, you take that grain and you --
11 we call it crush it. What happens is you squeeze the oil out
12 of the oil seed, and then you extract the oil from that.

13 Q. Now, I'm holding in my hand a bottle that contains a
14 bunch of seeds. You'd seen this before we walked in here,
15 right?

16 A. Yes.

17 Q. Is this one of yours?

18 A. Yes, it is.

19 Q. Just so the jury gets a sense of scope, how many seeds
20 approximately are in just this one little jar?

21 A. Approximately 20,000 seeds.

22 Q. And I'm holding in my hand another bottle with some
23 yellow liquid. What would this be?

24 A. That's the resulting oil out of one of our crops.

25 Q. This is really the oil, and those are really the seeds,

—Zacharias, B. - Direct—

1 right?

2 A. That's correct.

3 THE COURT: Is that the amount of oil that you get
4 out of what's in the jar?

5 THE WITNESS: No. They're not representative to one
6 another.

7 BY MR. MENCHEL:

8 Q. And who are the customers, just so the jury understands,
9 that you in the first instance would be selling this oil to?

10 A. Our first target market for that oil would be to sell it
11 to this aquafeed industry to create those pellets of fish
12 food to support the aquafarming industry.

13 Q. Do you have a name for the product?

14 A. We do. It's a category name for this product and others
15 to come. We call it Aquaterra, meaning it's for aquaculture,
16 but it comes from the land, terra. So that's the name of the
17 oil.

18 Q. I didn't know that.

19 Are there additional benefits from this canola-based
20 omega-3 oil for the aquaculture industry as compared to the
21 fish oil that's coming out of the fish from these -- coming
22 out of the oil from these -- I'm sorry, coming out of the
23 fish in these small little fishes?

24 A. Yeah, so the other thing we've done over this last year
25 is we've provided oil to the whole industry. We've fed over

—Zacharias, B. - Direct—

1 a million salmon this type of oil already.

2 THE COURT: What carrying device do you have to get
3 the oil into the feed? How does that happen?

4 THE WITNESS: Yeah, so we bring the oil to the feed
5 formulation facility, and what they do is they take
6 protein -- so they'll take some type of dry protein, kind of
7 like a whey powder, and then they vacuum the oil onto this
8 protein to create the pellet, so when you have a pellet, it's
9 actually loaded with the amount of oil that you want in the
10 feed.

11 THE COURT: Is the oil still in liquid form when
12 it's in --

13 THE WITNESS: Yes, it is.

14 THE COURT: So it's like a capsule that you might
15 take for medicine?

16 THE WITNESS: Well, essentially, yeah. You pull the
17 oil into this pellet. It's kind of like an animal feed
18 pellet. And then that's already loaded with everything you
19 need from a nutrition standpoint. So you're right; it's
20 feed, but it's almost like them taking pills of what they
21 need.

22 THE COURT: Do you put anything else in the pellet
23 except the oil?

24 THE WITNESS: Yeah. So it basically comes with the
25 whole nutritional package that that fish needs for where

—Zacharias, B. - Direct—

1 they're at in their life cycle. So there will be things that
2 will be included into that complete dietary requirement. So
3 it's everything from protein to -- regular canola is also
4 used as a source of fat, the omega-3s. If they want to add
5 any types of different types of nutrients or vitamins to it,
6 they do it all through that feed mechanism.

7 THE COURT: The patents that we're talking about
8 only relate to the oil; is that right? They don't relate to
9 any of the other additives in the pellets?

10 THE WITNESS: That's correct. It's primarily about
11 the oil itself, although there's some patents that go beyond
12 that, but what we're primarily talking about is the
13 technology that takes everything through this blueprint to
14 the oil itself; that's correct.

15 THE COURT: All right.

16 BY MR. MENCHEL:

17 Q. That's a good question His Honor asked. You're not
18 making the pellets, correct?

19 A. No. So we will sell the oil to the aquafeed industry
20 that develops these pellets. And I shouldn't oversimplify
21 it. That industry is very sophisticated. They get into
22 animal nutrition, and there's Ph.D. nutritionists that work
23 inside those companies that help to figure out exactly what
24 formulation you want to bring to the fish at different points
25 in time.

Zacharias, B. - Direct

1 Q. We were talking about whether or not there -- I think you
2 were talking about the fish that you've already been feeding
3 with this product through these pellets.

4 A. That's right. So I think the question is what benefits
5 are we seeing of this and is it any different? So we've
6 embarked on what we've described as the single biggest trial
7 that's ever been done with a feed ingredient.

8 We took the harvested crop from last year, actually
9 from 2018, took all the oil from that crop to be able to
10 provide to new customers, and on those fish farms, like we
11 saw with those different tanks, they've actually been able to
12 test our product and trial our product at full commercial
13 scale, so we've fed over a million salmon already.

14 And typically when you're trying to introduce a
15 brand-new technology like this, you're trying to get them to
16 understand and to see that it works just as good as fish oil.
17 So that was the first objective. So we found that it works
18 exceptionally well. And we get the same type of benefit out
19 of it as fish oil, but we're also finding that there's some
20 additional benefits to bringing this particular product
21 primarily because of the DHA aspects of it.

22 Q. Before we get there, you had testified --

23 THE COURT: You've sold a million what? You mean a
24 million seeds? A million what?

25 THE WITNESS: No. Sorry. What I said was we have

—Zacharias, B. - Direct—

1 fed over 1 million salmon, the fish.

2 THE COURT: You fed a million salmon.

3 THE WITNESS: We fed a million salmon this type of
4 product already.

5 THE COURT: Okay.

6 BY MR. MENCHEL:

7 Q. You had testified earlier that one of the problems that
8 was going on in the aquaculture/aquafeed industry was the
9 amount of DHA his dropped 75 percent, I think was your
10 testimony, from when they used to be fed the fish oil.

11 A. When they used to be fed 100 percent fish oil, that's
12 right.

13 Q. Is your product helping bring the amount of these
14 essential omega-3 oils back up into the fish?

15 A. It can. I mean, it really depends how much of our oil
16 you want to add. So you can increase the amount to what
17 extent you want to. So that is one of the things that is
18 exciting about this technology is the fish farm can actually
19 have -- supply some more of these types of oils so you can
20 actually now start to bring omega-3 levels back up if you
21 want to, which they could with fish oil as well, but this
22 enables the supply to be able to do that.

23 Q. And I think the jurors saw in opening statement sort of a
24 picture of a wild-caught salmon and a fish-farm salmon. When
25 you were using your product, this omega-3 canola oil, as fish

—Zacharias, B. - Direct—

1 feed for those million salmon, did you notice anything about
2 the color of the salmon?

3 A. Yeah. That was one of the great things that we've been
4 able to find with our technology is that when we increase the
5 total amount of omega-3s, and particularly with our product,
6 because of the amount of DHA that's in it, you're actually
7 getting a deeper, richer pink color out of the salmon, which
8 is something you want because typically when you catch
9 wild-caught salmon, you see that in the grocery stores, that
10 they have that deeper, richer color to them, and when we can
11 do that, it actually produces more fish at a higher grade
12 level or a higher premium grade level when they're using this
13 type of a product.

14 THE COURT: Now, you said something about you can
15 control the level of the omega-3. Now, does that mean you
16 can create a seed that will be anywhere on that level of
17 seven different omega-3 varieties?

18 THE WITNESS: Yeah.

19 THE COURT: Or do you always go for Number 7?

20 THE WITNESS: Yeah, so there's two different things,
21 I think, in the question you're asking, Your Honor.

22 One is, in the fish feed itself, we can increase the
23 amount of even our existing oil to be able to get more total
24 DHA and omega-3 into their diets, but what you're referring
25 to that I said previously is also a part of this technology

—Zacharias, B. - Direct—

1 suite, if you will, is that we could now produce canola seeds
2 that could express all different levels of those seven
3 different fatty acids. So -- sorry.

4 So the way to think about it is that our DHA product
5 we often describe as Product Number 1, but we have a lot of
6 other different product concepts that are still coming where
7 we'll bring different types of fatty acids to have different
8 levels of those different seven fatty acids if we want to.

9 THE COURT: Well, why wouldn't you want the
10 strongest one, if that's the way to describe it?

11 THE WITNESS: Yeah, exactly. DHA, we think, as I
12 describe it, is the gold standard. So that is the one that
13 we wanted to bring to the market first, particularly for
14 aquaculture and for a lot of human uses. If we choose to
15 look at some of these other fatty acids, it's probably more
16 to do with a specialized use for different types of human
17 disease types of applications.

18 THE COURT: Okay.

19 BY MR. MENCHEL:

20 Q. Mr. Zacharias, I'm going to try to keep my word for the
21 Court. So let's see if we can just keep a little shorter on
22 the answers so we can get through it. We're almost done.

23 Okay?

24 A. Okay.

25 Q. In addition to this canola oil for the fish feed, does

—Zacharias, B. - Direct—

1 Nuseed have other plans for how they're going to be using
2 this omega-3 canola oil?

3 A. Yes, we do. We mentioned we have a product called -- or
4 a category that we call Aquaterra for aquaculture. We also
5 have a category brand name called Nutraterra. So we intend
6 to take the same oil and bring it into the nutrition markets
7 for human health. So in that case, we would take this oil,
8 and we will encapsulate it into a pill so that we can bring
9 this oil to humans as well.

10 Q. And where is the money going to come from to fund this
11 next level of human nutrition into Nutraterra from Aquaterra?

12 A. There are strategies essentially to launch the oil first
13 into the aquaculture industry, and that will create the
14 revenues and the cash flow for us to be able to pursue much
15 more of the human uses.

16 Q. Now, I'm holding in my hand a bottle of oil capsules. Do
17 you recognize this as demonstrative?

18 A. Yes, I do.

19 Q. What is this?

20 A. That is a sample of our prototype where we've actually
21 already taken our oil and put it into these capsules, and
22 we're currently running some initial human clinical trials
23 with those products.

24 Q. Now, are there any advantages to the canola-based omega-3
25 oil from the fish oil capsules that people are taking today?

—Zacharias, B. - Direct—

1 A. Yes, there are. For most of us, or a lot of us, when we
2 take fish oil capsules, about half the population, 40 to
3 50 percent, don't actually do very well with fish oil
4 capsules. You get a reflux, or you get the fishy burp. I
5 don't know if anyone has experienced that, but it's actually
6 a big challenge, and some people, when they take them, they
7 stop taking them because they don't like them, whereas some
8 of the work we're doing here, because canola oil is naturally
9 clean and light tasting, we're already finding that we're not
10 having that issue, so it solves another big problem for
11 people wanting to take these types of supplements.

12 Q. Does Nuseed have any competition in this plant-based
13 omega-3 oil market?

14 A. Yes, we do.

15 Q. Who is that currently?

16 A. BASF and Cargill.

17 Q. Now, to date, have you entered into any contracts with
18 the aquaculture people, the ones that -- I'm sorry, the
19 aquafeed industry, the ones that make these food pellets?

20 A. We have not entered into any contracts at this stage, but
21 we are having lots of commercial discussions.

22 Q. Have you reached any roadblocks or obstacles?

23 A. We have.

24 Q. What are those?

25 A. Particularly in the last three months, Cargill launched

—Zacharias, B. - Direct—

1 the massive digital campaign about their intentions to also
2 launch this technology, and that's having some impacts on us.

3 Q. What do you mean it's having impacts on you?

4 A. Really, two different things: One is that it's stopping
5 our downstream customers who we've been working with now for
6 a couple of years to wanting to sign multiyear arrangements
7 with us as we're now launching, and we're also having
8 troubles with --

9 MS. SHAW: Objection, Your Honor. This is hearsay.
10 He's testifying as to what customers who are not in this
11 courtroom -- why they are not entering into contracts with
12 Nuseed.

13 THE COURT: Well, yeah, you can't testify as to why
14 somebody else told you they were buying a competitor's
15 product or why they didn't buy your products. You can
16 testify that when you try to sell your products, your
17 competition is, in whole or in part, Cargill if that's the
18 case. Is that the case?

19 THE WITNESS: That is the case. They're talking to
20 those customers, and it's impacting --

21 THE COURT: Well, is there anybody else in the
22 business except you and Cargill?

23 THE WITNESS: Not in this business.

24 THE COURT: Not at this point?

25 THE WITNESS: Correct.

—Zacharias, B. - Direct—

1 THE COURT: All right. That's enough on that point.

2 MR. MENCHEL: Agree. I was moving on.

3 BY MR. MENCHEL:

4 Q. Now, you know this trial is about whether our patent
5 should be enforced, correct?

6 A. Correct.

7 Q. Who sued who in this litigation, as you understand it?

8 A. BASF sued CSIRO and GRDC and Nuseed.

9 Q. And if the patents are not enforced, what would be the
10 consequences to you, Nuseed?

11 A. Essentially, if the patents are not enforced, those
12 patents will disappear. We would not have any protection
13 when we launch, and it would destroy our business.

14 Q. And in addition to Cargill, if you didn't have those
15 patents, could there be other competitors also coming into
16 this space?

17 A. Yes. If those patents are not enforced, it doesn't just
18 allow Cargill into the marketplace, but it would allow anyone
19 that wanted to come into that marketplace.

20 MR. MENCHEL: One second, please, Your Honor.

21 I have no further questions. Thank you.

22 THE COURT: All right. Well, this is a good time to
23 stop. I'm sure there will be some cross-examination.

24 We don't like to interrupt a witness's testimony in
25 the middle of it, Mr. Zacharias, but sometimes we have to do

1 that. But when we do it, the rules are that you should not
2 discuss your testimony with anyone or consult any documents
3 to further prepare yourself for your further testimony. In
4 other words, you should return to the witness stand with
5 exactly the state of knowledge that you leave it with today
6 and be prepared to testify further tomorrow.

7 THE WITNESS: Understood.

8 THE COURT: All right. You may step down.

9 THE WITNESS: Thank you.

10 THE COURT: All right, ladies and gentlemen, that
11 will conclude the evidence today. We will resume tomorrow
12 morning at 10:00. So you're excused for the day. Please
13 report to the jury room by 10:00. I hope you won't run into
14 the other jury.

15 THE CLERK: The other jury is coming back at 9:30.

16 THE COURT: If they're coming back at 9:30, they
17 should be cleared out by a few minutes before 10:00.

18 THE CLERK: So if you get here a few minutes early,
19 that would help.

20 THE COURT: You need to get to the front door before
21 10:00 in order to get here at 10:00 obviously.

22 (The jury exited the courtroom.)

23 THE COURT: The first matter we have to take up is
24 the issue with the Murphy testimony.

25 MR. CONNALLY: Yes, sir.

1 THE COURT: At this point, we don't know what his
2 testimony will be.

3 MR. CONNALLY: Correct, Your Honor.

4 THE COURT: So I'm going to ask Mr. Davis, who has
5 been the one who investigated the -- made the contacts in
6 England and so forth, to represent the opponents of the
7 issues that we're discussing.

8 Now, since we don't know whether those issues will
9 be made or will be accepted as evidence in the case at this
10 point, he'll be the only attorney here. And the only people
11 who will hear the Murphy testimony will be courtroom
12 personnel and Mr. Davis. It will be transcribed.

13 I'll have to ask everyone else in the courtroom to
14 please depart the courtroom. If you wish, you can wait until
15 this is over. I have no idea how long it will take. It
16 might take half an hour. It might take an hour. It might
17 take more than that. I just don't know. But you don't have
18 to stay for any purpose unless you want to stay to learn what
19 the results are of this inquiry by the Court.

20 MR. DAVIS: I appreciate the comments, Your Honor.
21 Obviously, if that is Your Honor's order, I would do it, but
22 it is actually Mr. Connally and Mr. Connally's firm that
23 undertook the investigation and has been working in the first
24 instance with Dr. Murphy.

25 THE COURT: Well, I thought you were the one that

1 contacted the British company.

2 It was you?

3 MR. CONNALLY: It was us, Your Honor.

4 THE COURT: You argued it, but you were the one that
5 did it.

6 MR. CONNALLY: Correct, Your Honor.

7 THE COURT: All right. Well, then, you'd be the
8 one.

9 MR. CONNALLY: Thank you.

10 MR. DAVIS: Thank you, Your Honor.

11 THE COURT: I'm going to have to ask everyone
12 else -- you can leave your papers here overnight if you wish.
13 The courtroom will be locked up until court officials open it
14 tomorrow morning. So you can take your materials with you.
15 You can leave it here, whichever.

16 MR. NG: And, Your Honor, just to be clear, at least
17 one of us will be remaining in the courthouse, outside of
18 course.

19 THE COURT: You may remain outside if you wish, but
20 we don't know whether any of this information will be public
21 or not at this point. So the only one represented here will
22 be the proponent of the Murphy testimony.

23 MR. NG: Understood completely, Your Honor, but if
24 the Court has questions for us or wants to discuss further,
25 we will be available throughout.

1 THE COURT: Okay. That's fine.

2 MR. NG: Thank you, Your Honor.

3 (Proceedings adjourned at 5:03 p.m.)

4

5 CERTIFICATION

6

7 I certify that the foregoing is a correct transcript
8 from the record of proceedings in the above-entitled matter.

9

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11 _____/s/_____

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Carol L. Naughton

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October 16, 2019

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